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Storage At Risk

Where Is Your Enterprise Vulnerable When It Comes To Storage?

by Christian Perry

• • •

They say a pot of gold lies at the end of every rainbow. In the enterprise space, that pot is filled with data, and intruders ride the rainbow directly to that data using any of a variety of attack methods. Because data is the primary target of today's breaches, storage architectures are quickly coming under fire for their lack of security.

"Human error is probably the most critical security vulnerability facing storage environments in small and medium-sized enterprises," says Andre Muscat, director of engineering at GFI Software (www.gfi.com). "IT administrators in SMEs are often overworked and required to do tasks that an administrator in a large business would never dream of doing. However, SMEs do not have the resources to employ huge IT teams, so all the work falls on one or two people . . . it should not come as a surprise that some vulnerabilities arise because administrators do not have the time to think about security."

Where Are You Vulnerable?

Due to the nearly limitless expanse of storage across any given IT architecture—including all the devices that access that storage—the vulnerabilities that can emerge are numerous. According to Muscat, one of the most common is the failure to implement the concept of least privilege—giving administrator rights on employees' machines or full, unaccountable access to all data and share and file level.

Another, he says, is the use of portable devices on the network. "Endpoint security is often overlooked by administrators who fail to realize that the USB sticks or iPods the employees bring to work every day are a perfect tool to copy data to or from the network. In a worst-case scenario, a 'trusted' but 'disgruntled' employee can bypass encryption, copy huge amounts of data, or upload malicious software, effectively bringing the network down or deleting important data," Muscat says.

The threats don't end there. Muscat explains that many SMEs do not have a secure storage area for their file and database servers. For example, if servers are kept in a box room or under a staircase, they can be easily removed if there is a break-in. Greg Gendron, worldwide enterprise systems tape manager for IBM

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The Buy vs. Build Debate

Should SMEs Construct Their Own Data Centers Or Purchase Space In A Colocation?

by Drew Robb

• • •

Fifteen years ago, lots of people built their own PCs. These days, few bother with the task. Could the same thing be starting to happen with data centers?

"For those looking at building dense infrastructures without having to worry about power and cooling constraints, buy is better," says Missy Young, executive vice president of sales engineering at Switch Communications Group (www.switchnap.com). "For many SMEs, the equation is weighted more towards buy due to the sheer economics."

But the answer to buy vs. build isn't necessarily straightforward, especially for smaller organizations. "SMEs should evaluate a number of factors before determining whether to purchase space in an existing facility or build their own," notes Vic Berger, a technology specialist at CDW. "First and foremost, it is important to consider the size requirements necessary to house the organization's data, as well as the relative value of the data to the business."

Factors To Consider When Building

SMEs should also consider such matters as how much it will cost to build all the elements involved, such as physical infrastructure, power, cooling, networking, hardware, and software, and how much it will cost to man the facility with both IT and physical security personnel.

Most companies set off on the data center building adventure without knowing the reality of what it entails. First of all, there is that potential minefield of planning permission. If you successfully negotiate that hurdle, you have to find a contractor and manage the project all the way through to completion.

"When you decide to build it yourself, you are really saying that you are taking on

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The answer to buy vs. build isn't necessarily straightforward, especially for SMEs.

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Identifying Your Enterprise's Threats

Where is your enterprise most at risk when it comes to storage, email, remote access, and corporate desktops? We talked with industry experts to find out.

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The answer to buy vs. build isn't necessarily straightforward, especially for smaller companies.

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■ EasyEncrypt Upgrade Kit, an upgrade utility for notebook computers with SATA hard drives, is now available from **CMS Products**. ■ **Diskeeper** announced Undelete 2009, providing real-time data protection and instant data recovery. ■ **Eaton** introduced Pulsar M uninterruptible power supplies designed for energy savings and heat containment. ■ The new **iStor** integraSuite/MC Management Center offers user control via a Java-based GUI, a command-line interface, or Microsoft's VDS. ■ **Kyocera Mita America** announced two new print management products provided by Equitrac. Equitrac Office and Equitrac Express work to simplify print-copy tracking and provide businesses insight into document output volumes. ■ **Nexsan** announced The Edge, a next-generation green NAS solution configured and priced specifically for the SME market. ■ **Rave Computer** announced its new server, the Rave/Sun Ultra 24 Hybrid. ■ **Sans Digital** announced its new 2-bay storage enclosure, the TR2UT-B, which will complete its TowerRAID series. ■ **Sherpa Software** released version 4.2 of Mail Attender for Exchange. ■ **Tabernus** added Secure Erase support to its E800 Eight Bay and E300 Three Bay Erasure Tools. ■ **VoSKY** released what it calls the industry's first Skype-certified, enterprise-grade PBX-to-Skype gateway for SIP networks.

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1. **What is the size of your company (how many employees)?**
   - ☐ Less than 10
   - ☐ 10 to 99
   - ☐ 100 to 199
   - ☐ 200 to 499
   - ☐ 500 to 999
   - ☐ 1,000+

2. **How often do you purchase computer hardware/software?**
   - ☐ Weekly
   - ☐ Bi-weekly
   - ☐ Monthly
   - ☐ Quarterly
   - ☐ Annually
   - ☐ No Involvement

3. **What is your annual computer hardware/software purchasing budget?**
   - ☐ $0 to $9,999
   - ☐ $10,000 to $24,999
   - ☐ $25,000 to $49,999
   - ☐ $50,000 to $99,999
   - ☐ $100,000 to $249,999
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CHIEFTEC

Compliance Is Key

Maintain Compliance Standards With Secure Elements' C5 Compliance Platform

INDUSTRY STANDARDS exist for a reason, but that doesn't make achieving compliance with every regulation any easier.

Secure Elements' C5 Compliance Platform is a tool designed to enable an enterprise to audit and evaluate its level of compliance all in one place and with one product. Further, the C5 Compliance Platform helps companies implement the necessary changes if and when compliance gaps are present relating to internal, industry, or regulatory policies for IT control and security.

The latest update to the platform is the ability to audit and manage EPA Energy Star settings for Windows XP and Vista computers. Now, companies can more easily comply with the mandate for computers and monitors to "sleep" when not in use.

Other features of the C5 Compliance Platform include configuration compliance scores, vulnerability scores, patch scores, and authorized software compliance scores. Benefits of the platform include smart automation, which results in fewer errors, repeatable processes, and predictable results; unified views for quick summary and detailed views of monitored assets; and overall improved compliance.

The C5 Compliance Platform is composed of four parts: C5 Element Manager, C5 Element Sensors, C5 Command Center, and C5 Compliance Content. Element Manager is an Intel-based 1U server for centralized management of element sensors, which are lightweight software agents. Command Center offers unified views of a company's entire compliance posture, and the compliance content library is maintained by C5's Security Labs professionals.

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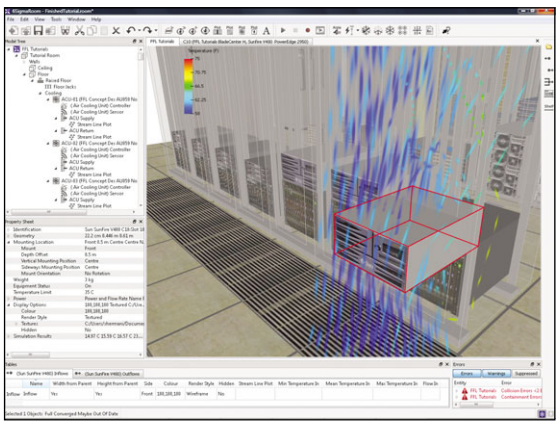
SECURITY AUGUST 29, 2008

Data Center Design Goes Virtual

Future Facilities' 6SigmaDC Data Center Design & Analysis Suite Offers Virtual Facility Planning



6SigmaDC's 3D modeling helps data center designers test out ideas.

A GOOD DATA CENTER starts with good design; it must be planned and laid out in such a way that heating, cabling, and more are done right. Future Facilities' 6SigmaDC Data Center Design and Analysis software suite offers designers tools that let them create a 3D virtual facility to test out ideas.

Designers can create a thermal model that essentially gives users a full inventory of the room, including cabinets, IT equipment, power systems, cooling systems, and ventilation grilles. Users can use the thermal tool to help configure cabinets with rack-mounted equipment, to configure the facility or room, to act as a layout and testing tool for room equipment, and to show ongoing configuration and management so changes can be tested before implementation.

Features include an easy-to-use GUI, the ability to read data from other design tools, large libraries of possible equipment, and a complete view of the inventory. The suite also offers drag-and-drop capabilities to aid in model construction and can predict rack or cabinet cooling and performance as well as grille flows.

Future Facilities 6SigmaDC Data Center Design & Analysis v.4

Starts at $45,000 per year and depends on configuration

Data center design tool that lets users create a virtual facility to test out configurations

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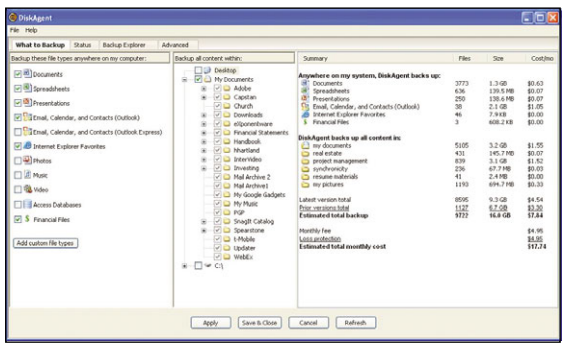
STORAGE AUGUST 22, 2008

Remote Backup & Data Loss Prevention

Spearstone's DiskAgent Offers Enterprise-Class Backup



DiskAgent by Spearstone lets you create secure online backups.

DATA IS PERHAPS the most valuable commodity a company possesses, and being able to recover it in the event of a disaster, secure it from a malicious hacker attack, or retrieve and protect it if a computer is lost or stolen is of utmost importance. DiskAgent SaaS (software as a service) from Spearstone seeks to offer a solution with remote backup and loss protection.

DiskAgent offers data storage and protection with an easy-to-use, scalable SaaS offering. Features include continuous online backup with centralized management and constant access to data, and if hardware is lost or stolen, users can remotely erase data, effectively preventing thieves from accessing sensitive files. DiskAgent lets IT admins track and potentially recover any stolen devices with its hardware recovery functionality.

By encrypting all backed up data as it moves both to and from the Amazon S3 and EC2 environments, DiskAgent meets security regulations and lets admins enforce document retention policies and grant or restrict user access to remotely backed up files.

The DiskAgent SaaS is an easy-to-use package offering remote backup options and data loss protection. Yet DiskAgent is designed as an enterprise-level protection package that individuals other than IT professionals can implement and maintain and requires no expensive infrastructure.

DiskAgent by Spearstone

Starts at $4.95 per month per device; volume discounts available

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MarketPlace NEWS

Apple, Verizon Top In Customer Satisfaction

Customers are more satisfied with Apple than any other computer manufacturer, according to research from the University of Michigan's ACSI (American Customer Satisfaction Index). Apple earned a customer satisfaction score of 85—the highest ever in the ACSI's personal computer category. Dell came in second with a score of 75, followed by HP with 73 and Gateway with 72. J.D. Power and Associates completed its own survey of customer service in the wireless industry, ranking Verizon Wireless first, followed by Alltel, T-Mobile, and AT&T. Much of Verizon's top ranking can be attributed to its ability to solve customer problems with just one contact, according to J.D. Power and Associates.

Taiwan Investigates Microsoft For Antitrust Activities

Taiwan has opened a government investigation to determine whether Microsoft holds a monopolist position over Taiwan's software market and, if so, whether it is abusing that position. Taiwan's Fair Trade Commission, which is conducting the investigation, will also consider complaints that the software giant is limiting customers in the choices they can make by only offering the Vista OS on new computers, not Windows XP. It will also explore whether Microsoft's pricing is appropriate for Taiwan. If the Fair Trade Commission finds that Microsoft has violated Taiwan's antitrust laws, it may have to change some business practices there and could be fined up to $797,361.

Apple Sued Over iPhone

An Alabama woman is suing Apple over her "Defective iPhone 3G" and is asking a judge to give the case class-action status, saying that "perhaps tens of thousands of plaintiffs" could be involved. Jessica Alena Smith says she's had slower-than-expected data speeds and an inordinate number of dropped calls with her iPhone 3G. In addition, Smith says, her phone connects to a 3G network less than 25% of the time. Smith also says Apple's advertising is misleading, claiming the iPhone 3G is "twice as fast at half the price." Smith is asking for a repair or replacement of her iPhone 3G along with unspecified damages and attorney's fees.

"Cloud Computing" Too Generic To Trademark

The U.S. Patent and Trademark Office has refused Dell's application to trademark the term "cloud computing." In its nonfinal refusal to Dell, the trademark office says cloud computing "describes a feature and characteristic" of Dell's services and that the term "appears to be generic in connection with the identified services and therefore incapable of functioning as a source-identifier" for Dell's services. Dell can submit evidence to contest the ruling; otherwise, it will become final in six months. Dell originally applied for the trademark in March 2007.

Court Upholds Open-Source License Legality

Reversing a previous lower court ruling that questioned the legal validity of open-source licenses, a federal judge has ruled that open-source software licenses do have legal validity under copyright law. The original case, Robert Jacobsen vs. Matthew Katzer and Kamind Associates, revolved around software to control model trains. Jacobsen used an open-source "artistic license" to license the software to Kamind, which then used it to create a rival product. The ruling from the lower court said the issue was broken contractual promises, not copyright violation. However, the higher court ruled that copyright law covers the covenants and conditions in open-source licenses.

Many Vista PCs Downgraded To WinXP

About 35% of PCs purchased with Windows Vista in the past six months have been downgraded to WinXP, according to a poll by Devil Mountain Software. The PCs are either being downgraded at the factory by the PC manufacturer or after the user received the system, according to the company. Devil Mountain Software, which runs a community-based network used to gather data on Windows computers, surveyed more than 3,000 PCs that use its exo.performance.network program. Microsoft's end-user license agreement allows users of Vista Business, Ultimate, and Enterprise to downgrade to Windows XP Professional.

Gartner Predicts Electronics Slowdown

Due to factors such as a weakened worldwide economy and high energy prices, analyst firm Gartner expects to see sales of electronics products slow down, which in turn will impact sales of semiconductors. Demand for electronic devices has remained solid in emerging markets, including India and China, which has bolstered chip sales for the time being, but Gartner expects the slowdown to affect them, too. In March, Gartner revised its estimate of a 6.2% chip revenue growth rate down to 3.4% growth for the year. A week after coming out with the new estimate, it also reported increasing inventories of chips, which remains a concern today.

HP CEO: Dell Had No Effect On HP Sales

Dell's increased presence in the retail market has not had an impact on HP's sales, according to HP CEO Mark Hurd. For its fiscal third quarter that ended July 31, HP's sales rose 10%, with software increasing its sales by 29%. Net income was $2.03 billion, or 80 cents per diluted share, compared to $1.78 billion, or 66 cents per diluted share, in the same quarter a year ago. Quarterly revenue totaled $28.03 billion. In May, HP announced plans to purchase EDS for about $13.9 billion; Hurd said HP will complete that acquisition during this quarter.

Microsoft Plans $500 Million Data Center In Iowa

According to Iowa Governor Chet Culver, Microsoft has announced plans to build a $500 million data center in west Des Moines. The data center will house Web servers and software in an effort to keep up with the increased demand for the company's Web-based services, such as Windows Live and Windows Messenger. Microsoft cited Iowa's low costs, educated workforce, and moderate climate as the main reasons for its popularity as a tech investment destination; Google also announced plans last year to build a $600 million data center in Iowa.

Sun Loses & Dell Gains In Worldwide Server Market

Posting an impressive 15% in server revenue year over year for Q2, Dell has edged Sun Microsystems out of third place, joining first-place IBM and second-place HP in the top three. Dell's 15% jump was also higher than the top two: IBM showed growth of 11.5%, while HP posted growth of 2.9%. Sun, on the other hand, showed a 6.8% decline in revenue. Overall, Q2 server revenue grew 5.2% to $13.8 billion. In terms of units shipped, HP took the top spot, with 30% of the market, followed by Dell, with 22.3%, and IBM, with 13.2%.

New Search Engines Can't Topple Google

While the two recently launched search engines may have garnered plenty of press, Wikia Search and Cuil have not been able to snag much of search giant Google's market share. Wikia Search, which made its debut in January, holds a 0.000079% share of the market, while Cuil, launched just a few weeks ago, holds just slightly more at 0.007%. By contrast, Google holds about 70.77% of all online search queries in the United States as of end of July—up from the 64.35% share from July of last year.

IBM To Invest $300 Million In Business Continuity & Disaster Recovery

In what it calls the largest investment in its 40-year history, IBM will spend $300 million on expanding its business continuity and disaster recovery business. The company will add 13 facilities worldwide to answer what it sees as a growing demand. The new facilities, built in such cities as New York and London, will house remote data management and information protection capabilities. The company also plans to speed up the build-out of its Information Protection Services business in order to deliver cloud-based computing services to support business continuity.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	August 15 $	August 22 $	% change from previous week
Computer Associates	CA	$24.42	$24.63	$24.48	▼ 0.61%
Cisco Systems	CSCO	$30.26	$24.91	$24.71	▼ 0.8%
Dell	DELL	$26.96	$25.06	$25.27	▲ 0.84%
Electronic Data Systems	EDS	$23.19	$24.82	$24.94	▲ 0.48%
Google	GOOG	$512.75	$510.15	$490.59	▼ 3.83%
HP	HPQ	$46.42	$45.59	$47.06	▲ 3.22%
IBM	IBM	$110	$126.36	$124.93	▼ 1.13%
Intel	INTC	$24.15	$24.26	$23.49	▼ 3.17%
McAfee	MFE	$35	$38.88	$39	▲ 0.31%
Microsoft	MSFT	$28.22	$27.81	$27.84	▲ 0.11%
Oracle	ORCL	$19.32	$23.04	$22.70	▼ 1.48%
Red Hat Software	RHT	$19.56	$22.75	$21.72	▼ 4.53%
Sun Microsystems	JAVA	$4.86	$10.86	$10	▼ 7.92%
Symantec	SYMC	$18.70	$22.27	$22.06	▼ 0.94%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

Upcoming IT Events

Are you looking to learn more about data center or IT topics? Network with some of your peers? Consider joining a group of data center professionals. If you don't see a meeting listed in your area, visit www.afcom.com, www.aitp.org, or www.issa.org to find a chapter near you.

- SEPTEMBER -

ISSA Mankato
September 4, 1 p.m.
Alltel Wireless
200 Technology Drive
Mankato, Minn.
www.katoinfosec.org

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ISSA Central Plains
September 5, 11:30 a.m.
River City Brewery
150 N. Mosley
Wichita, Kan.
www.issa-cp.org

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AFCOM St. Louis Gateway
September 9
Schneider Electric Technology Center
807 Corporate Centre Drive
O'Fallon, Mo.
www.afcom.com/afcomnew/stlouis.html

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Enterprise Architecture 2008
September 9-10
Washington, D.C.
events.fcw.com

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AITP Central Idaho
September 10, 11:45 a.m.
The Owyhee Plaza
1109 Main St.
Boise, Idaho
www.boisestate.edu/dpma
/dpmaci/meetings.html

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Bay Area SecureWorld Expo
September 10-11
San Francisco, Calif.
www.secureworldexpo.com

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ITEC Minneapolis
September 10-11
Minneapolis, Minn.
www.goitec.com

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AITP Nashville
September 11, 5:30 p.m.
Holiday Inn-Brentwood
760 Old Hickory Road
Brentwood, Tenn.
www.aitpnashville.org

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AITP Washington, D.C.
September 11, 6:30 p.m.
Alfio's Restaurant
4515 Willard Ave
Chevy Chase, Md.
aitpwashdc.ning.com

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AITP Pittsburgh
September 15, 5:30 p.m.
Slovak Catholic Sokol
801 11th St.
Ambridge, Penn.
www.aitp-pgh.org

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Interop
September 15-19
New York, N.Y.
www.interop.com/newyork

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VMworld 2008
September 15-18
Las Vegas, Nev.
www.vmworld.com/vmworld
/conferences.jspa

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Cascading Network Woes

Lancope StealthWatch Bridges Security Concerns At The Niagara Falls

by Curt Harler

• • •

EVEN FUN, RELAXING destinations have serious computing concerns. In upstate New York, the NFBC (Niagara Falls Bridges Commission) finances, constructs, and operates three historic bridges familiar to many tourists and honeymooners: the Lewiston-Queenston Bridge, the Whirlpool Bridge, and the Rainbow Bridge. Established in 1938, the Lewiston, N.Y.,-based NFBC also maintains the facilities for Customs and Immigration offices on both sides of the border. This is one network that needs to be secure from all possible threats and hostile attacks—both external and internal.

Late last year, the commission began looking for a new solution to meet that goal. "We wanted to prevent unauthorized user access to the network along with monitoring authorized access," explains Dave Woods, manager of information technology for NFBC (www.niagarafallsbridges.com).

However, this is not a trivial task. The NFBC network currently runs on a 10 Gigabit network with 500 nodes across seven locations. Recently, the IT department found that managing the network was taking up a lot of time and becoming quite complex. As the network grew, behavioral anomalies became harder to detect. The NFBC needed a solution that ran as full-time as the network does. The commission wanted to position itself to be proactive against IT security risks without burdening existing staff, but adding new staff was not an option.

"Previously, we had no permanent sniffer solution installed," Woods says. "We would typically deploy sniffers when troubleshooting or tracking down specific problems." However, the commission wanted something that was more consistent than the ad-hoc solutions it was using.

Network Specifics

Like any good SME, the NFBC did its due diligence. "We evaluated and investigated multiple products in the market at the time, including many in-line sniffers," Woods recalls. Like many other midsized operations, the NFBC runs voice, video, and data traffic across its network. And, like many other networks, during the past five years, the speed and size of its network has grown swiftly.

The NFBC serves as a landlord to several "tenants" around the Falls. "We own the property. We do safety and provide the (network) housekeeping," Woods explains.

The network traffic includes the toll receipt data from the bridges—a sort of PoS system for the collectors—and this data goes back to a central server. In addition, there is a sophisticated access control and CCTV system in place.

There are seven separate PBXes for voice that handle a combination of Internet and traditional analog phones, and IP tie-lines are used to connect that portion of the network.

Additionally, the network employs the Foundry Networks FastIron (www.foundrynet.com) chassis for its switches, with the FastIron SX 400 and SX 800 as major components in the backbone, and the FWS X-series delivers high-density 10 Gigabit Ethernet service.

"Tracking network activity became a very tedious process, and we typically would only see one Layer 2 segment of traffic at a time," Woods says. "Due to the speed of some of our network segments (currently as high as 10Gb), we decided to avoid the sniffer-type solutions and leverage the existing sFlow capabilities of our Foundry Networks equipment," Woods says.

A Good Fit

After reviewing several solutions, the NFBC selected Lancope's StealthWatch NBA (network behavior analysis) tool (www.lancope.com). StealthWatch gives IT departments immediate notification of security issues and provides troubleshooting data when there are problems, offering detailed looks into network, host, and user problems. NFBC uses StealthWatch as a monitoring and troubleshooting tool that detects and identifies problems with the network, as well as the hosts and users on it.

NFBC's deployment includes the StealthWatch Xe for sFlow, which aggregates information from its Foundry switches, and the StealthWatch IDentity-1000 appliance, which directly links individual users with specific network events. By using sFlow, the commission sees a sampling of the network, but that sampling is drawn across all network segments.

"StealthWatch's role was to provide the monitoring of authorized access," Woods says. All external traffic is monitored by a previously implemented UTM (unified threat management) system, which provides virus, spam, and intrusion protection and is treated separately from the internal monitoring with Lancope.

Adding to the complexity of the internal network is the need to monitor a flow of outsiders who have legitimate reason to use the NFBC's network. StealthWatch allows NFBC to keep a sharp eye on outside users/contractors using the network and inside contractors plugging in laptops or other devices—all of which can introduce IT security risks.

"StealthWatch even allows us to monitor our Guest VLAN traffic with ease," Woods notes. "We are in the midst of a large construction project right now, [so] we provide a Guest VLAN that goes through the same firewall, but we use the Foundry switches to forward the sFlow."

That way, if a contractor's laptop has a virus, the traffic can still be forwarded without endangering the central network. The system will not proactively isolate the infected computer, but Woods' staff will contact the person about the device.

Woods also likes the IDentity-1000 appliance, which directly links individual users with specific network events. "The Active Directory feature is a very handy tool . . . I use it more than anything else," Woods says.

"It gives me session information and machine names," he says. "I can see any Windows account with just a few keystrokes. Especially with the size of our network, it is important to be able to get that kind of information live, in real time."

Smooth Implementation

Woods also liked the ease of installation of the system. "The Lancope implementation was straightforward," Woods says. "Since we can simply forward sFlow packets to a collector appliance on the network, installation was quick and easy. Conversely, a sniffer-based solution would require many appliances with very high capture capabilities to be deployed throughout our network."

Two relatively new members to the staff work regularly with the system and found it easy to learn. "Even for a nontechnical person, it is easy to use," Woods says.

Woods says StealthWatch performs the NBA tasks as expected. "There are other features that we have yet to utilize; allocating time to this project has been our biggest hurdle," he says. When time becomes available, he looks forward to turning up the other features.

"I'm confident we have a solid product from Lancope," Woods adds. "The Lancope solution is still functioning well today. . . . We will be looking for other products to marry with Lancope in the future. In the meantime, the intuitive interface and the Active Directory integration make the StealthWatch appliance an easy decision." P

Lancope StealthWatch

Troubleshooting tool that detects and identifies problems with the network as well as the hosts and users on it

"The Lancope implementation was straightforward," says Dave Woods, manager of information technology for the Niagara Falls Bridges Commission (www.niagarafallsbridges.com). "Since we can simply forward sFlow packets to a collector appliance on the network, installation was quick and easy."

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NETWORKING & VPN

AUGUST 8, 2008

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Redcell OpsCenter provides one console for automatically finding networked assets and understanding how they're interconnected.

A KEY PROBLEM FACING IT professionals is managing and monitoring their collection of resources with multiple vendor-specific and disparate tools, which keeps IT operational costs high and the ability to automate tasks impossible. To prevent business growth from devolving into IT chaos, administrators need a single, consolidated system they can trust.

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SECURITY

AUGUST 8, 2008

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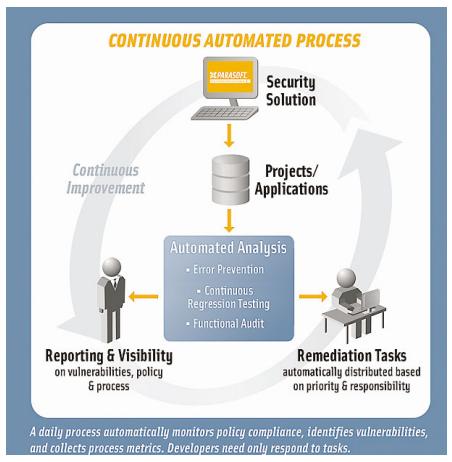

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CLIENTS

AUGUST 15, 2008

Simplify Web Development

Gizmox Visual WebGui For Silverlight Streamlines Enterprise Applications

THE DEVELOPMENT cycle of enterprise applications is critical for programmable Web plug-ins such as Microsoft Silverlight. A RAD (rapid application development) framework is one tool that can reduce overall development cycles. Gizmox has developed the Visual WebGui for this precise purpose, while still offering great flexibility.

Visual WebGui is a graphical user interface that enables Microsoft Silverlight for rich data-centric Internet applications suited for enterprises. The framework introduces seamless integration to Visual Studio and offers the Web developer simplicity through its Windows Forms drag-and-drop interface design. Additionally, WebGui incorporates the ASP.NET deployment model and allows full Silverlight graphics capabilities.

Executing complex AJAX applications can require a sharp learning curve; however, Visual WebGui features server-side controls that function in the same manner as desktop application controls, effectively replacing AJAX browser controls in runtime. The WebGui complete control toolkit currently contains more than 50 customizable out-of-the-box implemented for decoupled presentation in either DHTML or Silverlight layers.

The user-friendly interface is easy to deploy for complex enterprise-level AJAX applications thanks to WinForms API and design-time support. Powerful object-oriented programming transports AJAX without consuming more than 1% of bandwidth. Visual WebGui application security is military-grade, as well, because it runs on the server, so the browser operates as a viewing pane to the server, and no sensitive data is transferred.

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AUGUST 8, 2008

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Matthew Bernard, IT network manager at John Wiley & Sons, says, "Although hesitant to release my used data tapes, I found Recycle Your Media's data tape recycling service to be secure, professional, and more than I expected."

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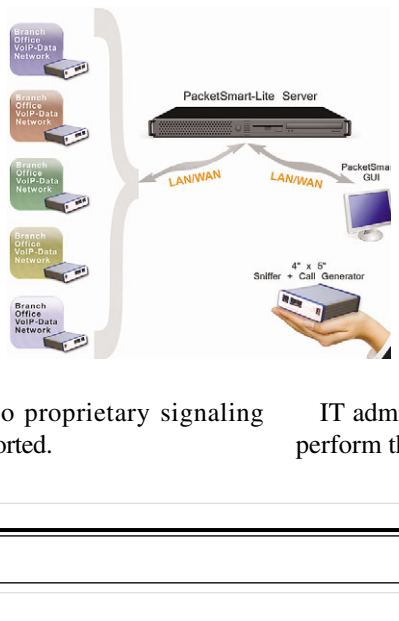
NETWORKING & VPN

AUGUST 8, 2008

Manage Media Networks

Packet Island PacketSmart-Lite Platform Troubleshoots Voice & Data Networks

PACKETSMART-LITE, an entry-level version of Packet Island's PacketSmart platform, is ideal for small and medium-sized businesses. PacketSmart-Lite includes everything needed to quickly and reliably troubleshoot voice/data networks for up to 10 different sites of 50 to 200 phones each. Each platform comes with a Linux-based Dell server fully loaded with Packet Island's proprietary PacketSmart software component and five compact micro appliances that provide sniffing and call generation capability from each site remotely. Each microappliance can handle up to 20 concurrent calls. SIP, MGCP, and Cisco proprietary signaling protocols are supported.



The PacketSmart platform provides convenient 24x7 remote monitoring for each site, allowing deep visibility into network issues that cause voice, video, and data degradation. A browser-independent, Java-based GUI allows quick retrieval of critical data, such as jitter, MOS, dropped packets, router path, traffic spikes/transient effects, and even full packet capture. Comprehensive reports are available to give you a reliable and automated snapshot of the state of your network.

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PACKET ISLAND

SECURITY

AUGUST 8, 2008

No-Hassle Password Management

Cloakware's Server Password Manager v3.5 Offers Upgraded Deployment & Integration Features

PRIVILEGED AND A2A (application-to-application) password management is a powerful way to maintain security for any company, yet many enterprises eschew this protection because of its prohibitive cost. Cloakware offers a more cost-effective solution to this issue with the release of CSPM (Cloakware Server Password Manager) version 3.5.

CSPM is a Shared Account Password Management platform designed to support data centers of various types, including multisite, heterogeneous, and high-volume centers. CSPM is designed to offer ensured high availability in distributed networks and improved integration with homogeneous data centers, all without disrupting the system or causing downtime.

CSPM utilizes streamlined deployment options, improved integration into existing environments, scalability, and availability to help companies improve compliance, protect confidential data, decrease system downtime, and reduce operational costs.

CSPM allows regular password changes and password policies to be applied to server-based accounts. It eliminates hard-coded passwords by removing the need to share passwords with developers, so the problem of needing to create a new password doesn't require redeployment of applications.

Other features of CSPM include reliability across multiple sites and plug-and-play application server support. Deployment options enable one CSPM deployment to act as a primary core with support for multiple remote data centers.

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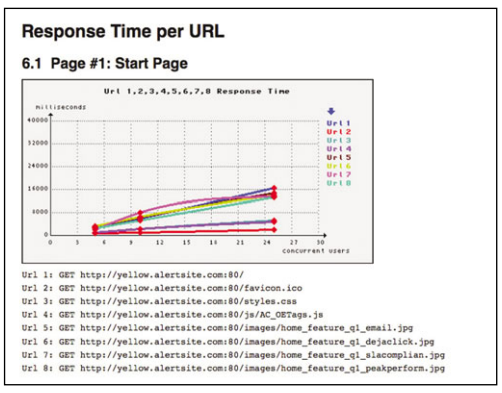
NETWORKING & VPN

AUGUST 8, 2008

On-Demand Load Testing

AlertSite Provides SaaS Testing To Improve Web Site Stability Before Launch



AlertSite's On-Demand Load Testing offers immediate reports.

WEB SITES ARE launched every day, but it's likely many have little or no idea if the site will be able to handle the loads it will encounter. The result is many Web sites experiencing errors that could have been avoided with some robust load testing.

AlertSite addresses this need with the release of On-Demand Load Testing, a SaaS (software as a service) application that is designed to offer businesses quick, simple, and intuitive load testing that simulates actual user loads. On-Demand Load Testing is designed to help companies identify scalability issues, bolster the infrastructure, and prevent site crashes so customers never experience downtime.

By leveraging AlertSite's DéjàClick technology, which simplifies the testing, design, and setup processes, virtually any user can build and deploy a load test easily and review the results quickly. Users can log on from anywhere in the world and quickly test. There is no need for learning a scripting language or acquiring special equipment software or extra personnel, which saves companies money.

On-Demand Load Testing works by simulating Web traffic from thousands of simultaneous users. Once the test is complete, the results are instantly generated into an on-demand report that shows a breakdown of Web site performance over time. Users can test URLs at any time, indicate the number of concurrent virtual site visitors, and even specify the time of day when automatic testing is performed. Users can reuse the scripts that are created from this process at any time and as often as needed.

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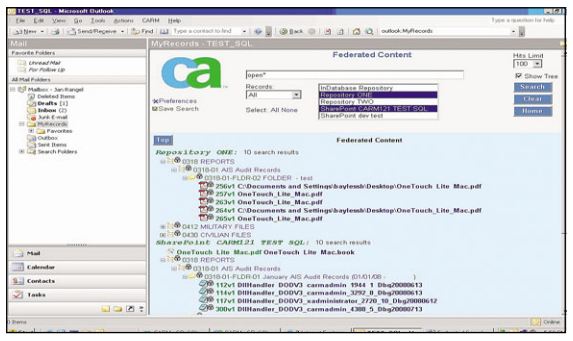
CLIENTS

AUGUST 8, 2008

Enhanced CA Records Management Solution

Helps Companies Streamline Records-Keeping Processes



CA Records Manager provides access to all content through a single interface

CA RECORDS Manager r12 is the latest version of the company's tool to help enterprises automate record-keeping processes. The program is designed to give users faster access to information, save time and money, and facilitate compliance with regulatory requirements and organizational policies. This new version delivers increased functionality with its records retention and disposition module, a localizable Web client, and added features to enhance the user experience.

CA Records Manager r12 is also certified by the United States DoD (Department of Defense) against the newly updated version 3 of the U.S. DoD 5015.2 standard, which provides for greater data security and integrity. Because of its long history of early and successful standards adoption, CA was the first to certify against the new, more stringent standard.

"One of the most important new features in Records Manager r12 is the creation of an enhanced retention module that is an interface to perform all administrative tasks related to retention and disposition," says Reed Irvin, vice president of product management for CA. "Additionally, this release also delivers significant enhancements focused on creating transparency, declaring records more efficiently, improving the user experience, and applying policy on all content across the enterprise. For instance, new scripted email notification capabilities are designed to send an email notification to selected recipients when your specific defined criteria are not met within a specified time frame."

CA Records Manager r12

Records management solution designed to help enterprises improve efficiency, automate processes and reduce risk

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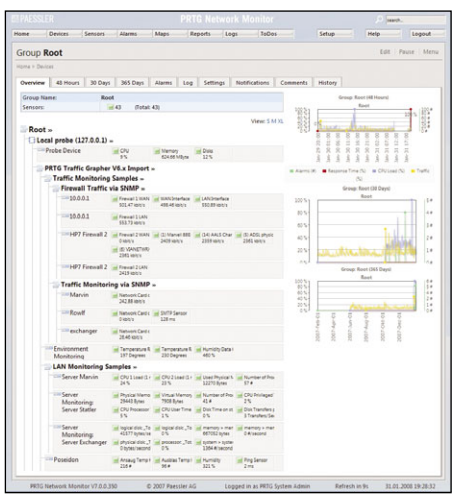
NETWORKING & VPN

AUGUST 1, 2008

Cost-Effective Network Monitoring

Effective Troubleshooting With Paessler's PRTG Network Monitor V7



Paessler's PRTG Network Monitor V7 offers an easy-to-use interface for more streamlined management.

ADMINISTRATORS ARE under constant and increasing pressure to troubleshoot and prevent network problems faster, and they need a streamlined solution with an interface that is simple to use.

Paessler's PRTG Network Monitor version 7 is designed to offer admins a cost-effective, easy-to-use method of ensuring network availability that reduces costs and saves time. It's designed to prevent outages, optimize connection performance, and control service-level agreements.

The software offers enhancements to automate network monitoring and reporting tasks, as well as the ability to leverage best practices for optimal configuration and analysis. Features include Auto-Pilot, a feature that constantly scans network segments for new devices and automatically determines device types and configures appropriate sensors for them, and preconfigured device templates that offer alarm and warning limits for standard devices. PRTG 7 also features extended support for more than 30 sensor types to monitor service, analyze network traffic, and track user behavior on the network.

The intended benefits include being able to identify out-of-the-ordinary traffic or usage patterns to quickly learn about the issues and act to resolve them.

Paessler PRTG Network Monitor V7

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STORAGE

AUGUST 1, 2008

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ONStor's Cougar 6000 NAS Gateways Offer High Performance & Power Efficiency

ON TOP OF scalability, companies need storage with high availability and high performance. ONStor's Cougar 6000 series of NAS gateways is designed to meet the needs of large enterprises and data-intensive environments, yet make it affordable for mid-range companies, as well.

The Cougar 6000 series is designed to deliver growth flexibility and the ability to meet changing storage needs without disrupting business as usual with ONStor's Ever-Scale redundant modular architecture, heterogeneous storage virtualization, and advanced multicore storage network processors.

The "cluster-in-a-box" design of the Cougar 6000 series is designed to enable companies to meet service-level agreements with a device that leaves a small footprint and saves energy. Yet the open data center-class networked storage appliance can scale up to 4PB (petabytes) and 400K+ SpecSFS Ops cluster.

The Cougar 6000 series can help reduce costs by allowing customers to leverage the storage they presently have, which bulks up their storage capacity without jettisoning their previous data center investment.

The Cougar 6000 series includes centrally managed and provisioned open storage, a compact and energy-efficient solid-state design, and 64-bit multicore pipelined network processor architecture. For high availability, the NAS gateways offer an 8-node cluster, 32 virtual servers per cluster, eight GigE ports, eight FC ports per filer, and other advanced features such as n-way clustering and pooled storage management.

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Mixed Messages

Social Engineering & Unprotected Data Plague Enterprise Email

by David Geer

• • •

THE THREATS TO enterprise email are many. Social engineers use bogus emails to dupe employees into breaking security. Employees unwittingly send messages they shouldn't, which contain important information. Email snoopers snap up unencrypted mail in transit. Employees forward email off the network to unsecured devices and consumer Web mail applications to work off-hours. And, finally, enterprises themselves implement corporate Web mail access without proper security measures.

However, by auditing the network carefully, adopting clever email policies, educating employees in street smarts and common sense around vulnerabilities, and countering with security technologies, SMEs will address most threats.

Email Traps & Hazards

Social engineering—a type of attack that leverages employee trust to break security—is an SME's No. 1 email security vulnerability, according to Randy Abrams, director of technical education at ESET (www.eset.com), a leading anti-malware software vendor. Emails asking users to click links or log in to their banks are prime examples.

"By simply clicking a URL in an email, a user could infect their system without realizing anything has happened," says Chad Loder, director of engineering at Rapid7 (www.rapid7.com), a network security software vendor. Email-based links entice users to log in to bogus representations of their banking sites, only to record their passwords, access their accounts, and steal their identities for profit.

Attackers have developed the latter form of social engineering, commonly called phishing, into spear phishing—emails that appear to come from trusted sources inside the employee's enterprise. The attackers target these emails at stealing intellectual property or confidential data from the specific company, according to Gene Spafford, executive director of CERIAS (Center for Education and Research in Information Assurance and Security) at Purdue University (www.cerias.purdue.edu).

Educate users about the dangers of email so they don't succumb to social engineering or carelessly release confidential data.

Data leakage, another serious vulnerability, happens when employees forward important data by email. People who aren't authorized to do so or who simply don't know the information is private may transmit important documents, account information, or passwords out of the network to parties who shouldn't be privy, according to Spafford. Employees who want to work remotely forward email off the network to unsecured BlackBerrys or Web-based mail accounts such as Gmail, where it is susceptible to compromise, according to Loder.

Still another form of data leakage occurs when messages and traffic aren't encrypted, exposing them to snoopers who listen in on connections and retrieve or change the emails' contents. By changing key information and sending it on to its destination, snoopers cause companies to make pivotal decisions based on errant data, Spafford explains.

Corporate Web mail is a weakness in the email security chain, according to Loder. SMEs providing remote Web-based email access for their users often require only usernames and passwords for access, Loder explains. Users log in to these accounts from home computers, laptops, or public computers in cyber cafés or hotels, exposing their passwords to family members or strangers.

Protective Measures

One of the best ways for an SME to discover its vulnerabilities is through self-audit, according to Spafford. SMEs should audit policies for rules that circumvent email vulnerabilities. If rules and means of enforcement don't exist, the enterprise may be vulnerable.

Healthy policies address appropriate email usage and specify what employees should do with questionable messages. "Policies should specify that employees don't open certain kinds of attachments and don't click on embedded Web links," Spafford explains.

Educate users about the dangers of email so they don't succumb to social engineering or carelessly release confidential data, Spafford continues. Make sure they understand the technology behind the threats so they can apply common sense to their email usage, adds Stephan Mueller, lead evaluator at Atsec Information Security (www.atsec.com).

Consider data leak prevention tools that scan messages and attachments for confidential information and stop it before it leaves the organization. Encrypt emails and message traffic to stop snoopers who read, alter, or capitalize on messages sent in plain text, says Spafford.

Get a handle on outbound mail. Configure firewalls to block outbound connections to TCP port 25, which the SMTP protocol uses for outbound mail transfer, explains Loder. Then, permit a limited number of designated company mail servers to make outbound SMTP connections.

Monitor that outbound mail to see who is automatically forwarding mail off the network to handheld devices and Web mail accounts, which are not under the enterprise's control. Sensitive emails that are forwarded this way are at the mercy of the protections, or lack thereof, of those devices and services, warns Loder.

Develop and enforce policy to stop or secure email-forwarding behavior. If SMEs don't provide employees with what they need to do their jobs, they will find a way to circumvent policy to do it. If they are forwarding email in order to have 24/7 access for working anytime and anywhere, provide them with a secure solution that enables this, Loder suggests.

For SMEs that use a remote Web mail server, two-factor authentication is a good technology for securing that remote access, according to Loder. Add another factor of authentication to usernames and passwords, such as requiring the user to type in characters presented in an image file. This will prevent phishers who steal only passwords from gaining access. For BlackBerrys and other devices, add email encryption on-the-wire and on the device, Loder advises. P

Top Vulnerability: Employee Email Behavior

Randy Abrams, director of technical education at ESET (www.eset.com), a leading anti-malware software vendor, believes that an employee who exercises naïve email behavior at home—opening attachments and clicking embedded links—will transfer that behavior to work, exposing the enterprise to the same kinds of threats.

"Security isn't simple," Abrams explains. As products evolve to address vulnerabilities, the bad guys will be working on ways to skirt them. Their methods will be rooted in social engineering.

"The only truly effective solution for social engineering is an educated and thinking employee," Abrams concludes. "The enterprise can't simply give users a checklist of 'Dos and Don'ts' and expect everything to be done right. They have to understand the concepts. When they understand the concepts, they can see variations on social engineering attacks." Then, they can exercise good and intuitive judgment to avoid entrapment.

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Storage At Risk

Continued from Page 1

(www.ibm.com), adds that many SMEs run Windows Server or Unix environments with few security measures, such as authentication, because they can be complex and difficult to implement.

Lock It Down

According to Kevin Daly, CEO of iStor Networks (www.istor.com), data is vulnerable in only two situations: when it's in transit and when it isn't. Vulnerabilities surrounding data in transit originated when organizations moved from internal storage (DAS, or direct-attached storage) to network-oriented storage (NAS and SANs), and while IP-based network storage certainly can be vulnerable, Daly says data in transit can be effectively protected by practices and policies.

Data at rest, on the other hand, is another story. Assuming an enterprise configures a first level of defense by setting up and maintaining access permission structures to create a control structure for who can and cannot access data, there remains the issue of what happens when the data comes to rest on a physical hard drive. A straightforward way of preventing unfettered access to this data, Daly says, is encrypting it before it goes on the drive. But he says that even those who are willing to live with the steep performance hits caused by encryption don't always use encryption because of the consequences—such as loss of data—of any errors while using it.

"There is a light at the end of this particular tunnel, however," Daly says. "Disk drive manufacturers are beginning to provide drives that encrypt and decrypt the data in the drive. This addresses many—but to be honest, not all—of the issues associated with protecting data at rest on disks. It is not common yet, but its use will be growing, and it will significantly mitigate the vulnerability of disk-based data."

Daly recommends several "first-order actions" that organizations can take to protect themselves against storage vulnerabilities: Organize data to limit the use of (and access to) sensitive, critical, and valuable data; use systematic permission structures and access control lists; centralize the storage of critical data as much as possible; use VPNs where possible; minimize or eliminate the use of removable media; encrypt drives wherever possible (particularly in mobile devices); design (or redesign) the backup and restore process with security in mind; and train and educate all users about their responsibilities for data security.

Don't Forget Policy

There's a rising tendency to rely on technology to address storage-related security issues, but some experts feel that policy-making and employee awareness are similarly effective in keeping storage secure. Jame Ervin, product manager for DNF Security (www.dnfsecurity.com), says that employees are the first line of defense against data breaches.

"Many of the widely publicized security breaches involved a loss of physical control over the data—stolen laptops, missing backup tapes, and so on. In many cases, employees could have added an additional layer of protection with password-protected computers or backup tapes. Organizations should have a defined policy for access to data leaving the premises and for data inside the office and act accordingly," Ervin says.

There are three key requirements to implementing an effective storage security policy, says Gary Brown, director of storage solutions for Forsythe Solutions Group (www.forsythe.com). First is executive sponsorship of the security policies, policy enforcement, and continuous auditing of policy effectiveness, followed by the identification of the stakeholders and owners of the security policies. These people must accept their roles to participate and respond to inquiries and requests in a timely manner.

Finally, "You need to architect a data protection environment that can support the policies and that is flexible enough to support potential future requirements," Brown says. "This includes selection of both software solutions and physical hardware that will support policies, protection, performance, and availability of information. Too often, we see organizations look at storage hardware devices that provide storage functionality but may never support a good storage security policy."

Top Vulnerability: Data Leaving The Building

Data within the walls of an enterprise can be locked down with heaps of security, but as soon as it leaves those walls, it's up for grabs. Laptops, PDAs, smartphones, USB key drives, portable hard drives, backup media, and other items often hold plenty of sensitive company-related data that can create big trouble if it ends up in the wrong hands.

"It is emotionally difficult for employees to appreciate that a one-half-ounce, $20 thumb drive can hold enough information to cost the organization millions of dollars in losses, disruptions, and fines, but it can," says iStor Networks CEO Kevin Daly (www.istor.com). He recommends using encryption to protect drives in mobile devices and to protect backup media. He predicts that all portable business devices will eventually have encrypted storage devices, but in the meantime, organizations must use what's available to protect data leaving the building.

The Build vs. Buy Debate

Continued from Page 1

the responsibility, as well as the risk for a complex electro-mechanical construction project," says Michael Wilkes, president and chief disambiguator for Dynamic Answers (www.dynamicanswers.com).

The lucky ones either already have or can find on the market a secure, well-air-conditioned building with redundant Internet pipes. All they have to do, then, is fill it with racks and servers and tie it into a network. But much of the time, you end up having to take care of the myriad details yourself.

"If you do the whole thing, it will include planning the building completely, from site selection and permitting through county inspection and occupancy requirements," notes Wilkes.

If you purchase an existing building, you'll need to weed out properties that don't have the special features needed for a data center. That eliminates locations that don't have high enough ceilings, those that have limited power capacity, and facilities that have so many entrances that physical access security becomes a nightmare.

Comparing Building vs. Buying Data Center Space

Build:

- When you have loads of data to back up that require plenty of babysitting
- When your overall space and load requirements are substantial
- When your environment requires rigorous management
- When you have plenty of IT resources internally
- When you already have an experienced internal team skilled at facility construction
- When your data has to be kept so secure that even the most diligent colocation doesn't qualify to host it

Buy:

- When you need to eliminate upfront costs linked with building a data center
- When you need to accurately predict total data center costs
- When you lack IT resources internally
- When you want to focus on core competencies
- When you want to add the latest blades and servers but are unable to come up with enough power or cooling

Buying At A Colocation

The alternative to building, of course, is buying space in a colocation, or leasing equipment and space. This can vary from a single rack to a large cage with row upon row of racks.

"When you put your equipment alongside someone else's (caged or not), you are colocating," says Wilkes. "On the expensive side, you can have several cages of leased equipment that are managed by others. On the cheap side, you can have one of your own servers that you manage remotely."

Whenever you need something that exists in both quantity and variety, Wilkes believes you should seriously question your need to build it yourself. "If you are not in the business of creating highly complex technical solutions and you think you can build a data center better and/or cheaper than a data center expert, there might be something in your drinking water," he says. "If you get the blueprint wrong, you could end up with enough Internet capacity to run NASA but only a thimbleful of disk space."

A couple of visits to data centers illustrates this point. One SME built its own data center in an older facility. Unfortunately, the airflow for the room is inhibited by huge concrete ribs that run perpendicular to the cold air vents. The result is that new blades sit uninstalled, as there isn't enough cooling or power to cope.

In comparison, a different facility features row after row of densely packed racks. Its buildings have vast reserves of power and cooling, more than any customer can possibly consume.

Size Matters

It's impossible to say that a smaller company should buy and a larger one should build, or vice versa. "The rationale of build or buy does not change with size, but the ROI tipping point does," says Wilkes. "At some increase in size (server count, staff count, or other metric) the per capita cost tips toward ownership instead of renting. There is a substantial risk with technology, however, and that can cause you to underestimate the total ownership cost."

Factors to consider when thinking about owning the whole enchilada, then, are architecture and site planning, build-out cost, equipment purchase cost, equipment upgrade cost, building maintenance, staff training, and increased HR overhead.

Aggressive Non-Delivery Report Spam Combat

SonicWALL's Email Security 6.2 Offers Complete Inbound & Outbound Email Protection

SPAM IS THE enemy of every network administrator; it clogs inboxes, creates unnecessary traffic, and can deliver malware. Although measures at the client level can combat these dangers, preventing spam from reaching desktops is a powerful way to keep your network secure.

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When an outgoing message is sent, it is tagged with a private key; when NDR messages are received, the tag is checked for validity. As SonicWALL processes both in- and outbound traffic, this tag checking can be done seamlessly for both the customer and end users.

Other features of Email Security 6.2 include enhanced language capabilities, including Dutch, French, and Swedish; improved visual representation of performance metrics for easier monitoring by administrators; and simplified licensing, so a user can choose the SonicWALL Email Security appliance or software system that best fits an organization's needs. For example, subscription services can be purchased in user packs of 25, 50, 100, 250, 500, 750, 1,000, 2,000, 5,000, or more as needed.

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Outside The Perimeter

Remote Access Opens A Can Of Security Worms For SMEs

by Kurt Marko

• • •

NETWORKED COMPUTING is the lynchpin of today's IT environment, and the ubiquity of public broadband networks allows the corporate network to extend anywhere employees can reach the Internet. Remote access has blurred the lines between the office and home, corporate LAN, and Wi-Fi hotspot, but the convenience comes at the price of manifold threats to network security. Yet with proper network design, event monitoring, user account management, and security policies, remote access needn't constitute an open invitation to hackers; IT managers can still provide the convenience users want with the security management expects.

Major Vulnerabilities

One of the biggest vulnerabilities John Kindervag, network security analyst at Forrester Research, sees at many companies is also one of the most fundamental: a poorly designed network architecture that doesn't properly partition remote clients from internal LANs. Segmented networks facilitate a layered defense strategy whereby traffic can be thoroughly inspected for malware or other attack vectors prior to accessing trusted internal resources.

Aggravating vulnerabilities exposed by improper network design can be firewall and VPN configurations that are too permissive. VPNs are the heart of any remote access solution, yet Kindervag says many companies don't consider the security implications of various VPN options such as split tunneling.

Peyton Engel, a technical architect and security specialist at CDW (www.cdw.com), highlights that a lack of control and oversight over remote user accounts and their access rights can represent a hidden threat. He says it's common for IT departments to focus on procedures for establishing remote access accounts but to forget tools and processes designed to remove access for those who no longer require it.

Another common practice that can expose a business to unnecessary risk is granting all remote users the same network privileges. It's important to understand the user community before implementing remote access, says Engel, who adds that "IT should pay close attention to the principle of least privilege . . . don't grant people more access than they need." He finds many companies granting remote users, whose systems are subject to many more threats, the same access rights as those on internal networks. Engel recommends users get only the level of access required for their applications and no more; for example, if a road warrior on a BlackBerry mainly checks email and his calendar, he doesn't need unfettered access to the entire corporate LAN.

Detection & Prevention Measures

Mitigating and preventing remote access threats involves best practices like those used for any other IT security issue, says Kindervag, beginning with a risk management program. A formalized risk management strategy can drive more detailed activities such as network vulnerability scanning, penetration testing, and policy development, he adds. Once specific network vulnerabilities are discovered, a follow-up gap analysis is necessary to uncover where existing security measures are inadequate and to serve as a roadmap for new policies and controls to plug security holes. He notes that risk management and vulnerability assessment are ongoing processes, not tasks: "There's no end game for security."

Due to the specialized skills involved in performing a thorough penetration analysis, as well as the constantly evolving threat environment, Engel says that at least some of the vulnerability testing is best done by outside experts. Ongoing network scanning with a number of services providing perimeter network probes is also advisable, according to Engel, while Kindervag recommends IT consider adopting security risk and compliance management software.

In order to gain control over remote access users, Engel says it's important to consolidate and integrate user account databases. He also highlights the importance of vigilant network monitoring to securing remote access networks. Event detection and correlation software, also known as security information management systems, can be powerful tools in automating this task, according to Engel. He notes that remote access gateways can produce a multitude of information; however, without an automated means of culling through the data, it can be difficult to spot compromised systems or external attacks.

Wireless networks present additional challenges for IT security managers both when used within the office and by mobile employees accessing public Wi-Fi hotspots. Forrester analyst Chris Silva notes that wireless LANs significantly expand the "footprint" of internal networks because their radios are likely broadcasting to locations impossible to predict without a detailed RF site survey. As with VPN connection, Silva says it's advisable to partition wireless LANs from internal wired networks and to configure wireless controllers to detect and disable rogue access points.

Given the ease with which compromised mobile clients can spread malware to the rest of the enterprise via a VPN connection, Silva says companies should consider deploying NAC (network access control) to ensure that remote systems meet standard security criteria before accessing internal networks. Should a client's system fail the security check, perhaps with an out-of-date antivirus database or no personal firewall, NAC systems can still allow them limited connectivity, typically via an isolated "quarantine" DMZ (demilitarized zone), while protecting the corporate LAN. P

Top Vulnerability: Poor Network Design & Split Tunneling

Like building a house, running a secure remote access network requires detailed planning and a solid foundation. Perhaps the biggest vulnerability SMEs face is having a poorly designed network and loose security configuration. According to John Kindervag, network security analyst at Forrester Research, many enterprises don't adequately segment remote networks, which have much greater risk exposure, from their core internal LANs. A basic tenet of secure network design is partitioning LANs into zones of different security and, most importantly, segmenting external traffic from internal networks. Traditional Internet firewall design illustrates this principle; however, Kindervag often sees customers bridging remote VPNs directly into office networks with no intervening router filtering, firewall, or intrusion detection system. He notes that an encrypted VPN does nothing to prevent compromised client PCs from spreading malware. By terminating VPN connections on a separate network, traffic from external systems to internal servers can be thoroughly inspected for attack signatures and malware.

A related and equally common practice that can increase a network's exposure is split tunneling, or the ability of VPN clients to bridge between the secure VPN link and their local, unsecured LAN. With many employees having home networks or mobile users accessing a VPN from public Wi-Fi hotspots, split tunneling can allow an outside system to effectively act as a router for any external network to which it's attached. Unfortunately, disabling the local network whenever a PC has a VPN connection is a major inconvenience for employees relying on network printers or NAS file shares. It also means that all traffic bound for the public Internet routes through the company's WAN instead of their local broadband connection. For these reasons, Peyton Engel, a technical architect at CDW (www.cdw.com), says companies are rethinking their bans on split tunneling, preferring to add other layers of defense as countermeasures.

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Security Conundrums

Desktops & Laptops Alike Can Pose Risks

by James Cope

• • •

THERE ARE AMONG us those lucky workers who still use computers in physical offices rather than toting laptops to and fro. Even so, the idea that desktop-based computers are more secure because they stay behind the physical facilities of your company is often based on wishful thinking.

Door alarms and outdoor lighting may help business owners feel protected come closing time, but the computers inside the office building are far from secure, according to Peter Evans, vice president of marketing for IBM Internet Security Systems (www.iss.net) in Atlanta. And because of desktop connections to the Internet, email from outside the company, and employees syncing handheld devices to their desktops, the business "perimeters are still very porous," Evans says. Add to that the risks associated with teleworking, and SMEs have some serious security concerns on their hands.

Physical Security: A Matter Of Vigilance

Whether they use laptops or desktop PCs, employees need to be aware of the first rule of computer security: vigilance. "All too often, users assume that no one would steal their computer," says Mike Flannelly, a spokesman and product manager for Computer Security Products (www.computersecurity.com) in Nashua, N.H. Flannelly says the majority of computer thefts "are crimes of opportunity," both inside and outside the office.

Consider open office environments. In companies where visitors often come and go without escorts, there's nothing to stop an enterprising thief from packing up an unattended laptop or even a compact desktop computer from an open cubicle.

It doesn't take much to avoid these types of thefts, Flannelly says. If you have an office with a door, close and lock it. Otherwise, a simple cable lock that tethers the computer to the desk is usually enough to dissuade the casual thief. Encouraging absent employees to put laptops in a desk drawer (preferably one that locks) is another simple solution. Even an inventory label on the front of a desktop PC is often enough to make someone think twice about heisting it. For paranoid desktop users, there are locking cases that help prevent theft of the innards—removing the hard drive, for example.

Laptops at airports and in parked cars are easy pickings for both professional and casual thieves, Flannelly says. Encourage your employees who remove their laptops from the office to keep them close by and assume that someone can and will steal it given an opportunity.

Finding & Fixing Data Leaks

From desktop to network to server—whatever the path—today's malicious software coders and social engineers are no longer interested in fame like the hackers of just a few years ago. Instead, they're after high-value data, which equates to money.

"Anywhere you have [more than] 500 people in more than one office, data resides with multiple people," says Yankee Group Research Fellow Laura DiDio. That can make unattended desktop computers sitting ducks.

"Walk in with a USB drive and plug it into the USB port. That's a real risk," says Darrell Rodenbaugh, senior vice president of the midmarket segment for McAfee (www.mcafee.com). The same thing is true for small desktops and laptops that aren't locked to a desk: They can walk out the door with very little help.

Less obvious are phishing scams that direct users to fake Web sites that look like the real thing but install malware that looks for company data and personal information.

Other potentially leaky data pipes that concern Evans are the online social networks. He says, "There is a whole universe of workers coming into the workforce who will start using these tools to do business. The challenge you have is that the new generation . . . isn't really cognizant of the risks they introduce to the business." Not only do these tools offer channels for sharing company data with people outside of the company, but they also present new ways for "Trojan horses to get into the buildings."

Evans says that smaller companies are not immune to data leakage, because the effort by sophisticated malware coders and those who specialize in malicious intrusions is automated and global. "It [malware] doesn't care if it's a small business or a big business, because these tools [used by data thieves] are automated," he says.

SMEs should caution employees to not leave running computers unattended and to keep desktops physically secured, put in place policies about sharing passwords, and establish guidelines on what online tools are permissible for office use.

Applying Patches

While major vendors of desktop operating systems and applications automate updates and patches that plug security holes discovered by information security analysts, security software vendors, and even by hackers, it doesn't mean they're applied to all desktops routinely. The solution is relatively obvious: Be sure that automatic updates on desktop machines are turned on and that they are set to download patches and apply them when the computer itself is on and connected to the network.

There are some things in particular to look for when it comes to updating applications. Setting automatic updates for Microsoft Windows, for example, doesn't necessarily mean that the user will receive updates for the Microsoft Office applications automatically. You need to turn on automatic updates to the applications, too.

And don't set applications to update on a wholesale basis. Full updates sometimes contribute to software bloat and slow down applications. Generally, enterprise managers can customize the update settings to avoid applying unnecessary changes. Ask the question: Does the update fetch and install important or critical security patches and application changes that improve the performance of an application, or is the recommended update one that may install optional fluffy features that a user may not need?

Be sure that automatic updates are turned on and set to download and apply patches.

In small enterprises, it may be necessary to routinely visit desktops to ensure that they have the latest critical software updates installed. As a part of the process, ensure that updates and desktop scans for antivirus and antispyware applications are set to take place automatically. P

Top Vulnerability: Security Management & User Awareness

A recent study by McAfee (www.mcafee.com) concludes that 39% of SMEs surveyed in the U.S. "spend just one hour per week proactively managing IT security threats." That isn't surprising, given that many of the IT people working for SMEs are over-tasked as it is. One solution, aside from buying security training for existing IT personnel and giving them the cycles to actually manage security in the SME, is to insist on simple automated desktop tools and have a contract security pro do enterprise risk assessments at regular intervals. And in the absence of enterprise-wide security controls, another positive step is to establish user policies and conduct training sessions on acceptable computing behavior across the company.

STORAGE JULY 25, 2008

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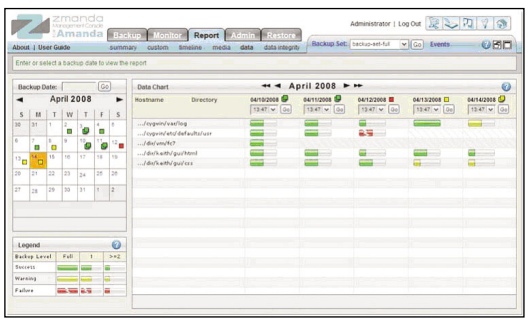

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Other new features of Amanda Enterprise include online backup support for Microsoft SQL Server, Microsoft Exchange, and Oracle databases and protection for Windows Active Directory. The software can restore a variety of hardware and virtual environments and uses Microsoft's Volume Shadow Copy Service to ensure reliability during hot backups so data access won't be impacted.

Amanda Enterprise supports a variety of backup media and methods. Data and archives can be stored on disks, tape, optical devices, or online storage services. The Department of Homeland Security has certified it is free of security defects.

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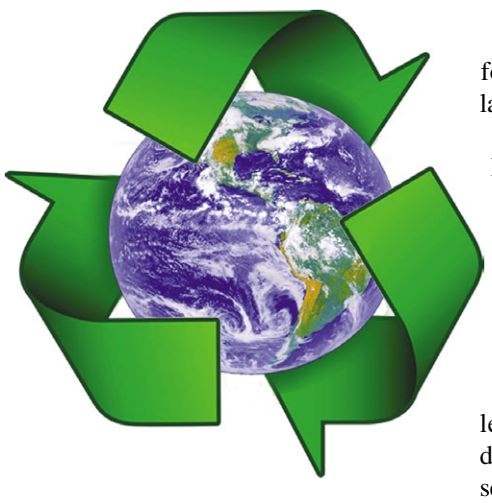

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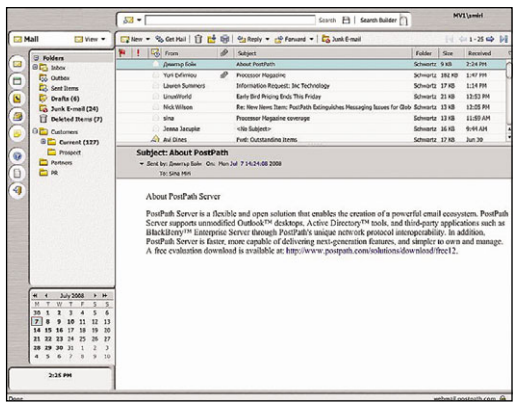
Complete Email & Collaboration Server

PostPath Ensures Ongoing Service In The Event Of A Failure



PostPath Server High Availability Edition v2 is a drop-in alternative to Microsoft Exchange.

POSTPATH SERVER HIGH Availability Edition v2 is a complete email and collaboration server that is a drop-in alternative to Microsoft Exchange and incorporates multiple measures to ensure ongoing service in the event of a failure in the underlying hardware or network systems. It consists of a multiserver bundle with one or more instances of the primary PostPath Server that act as the mailbox email server(s) during normal operation, plus a redundant server to take over in case of primary server failure.

The PostPath Server uses a "continually consistent" file-based data store. By exploiting the performance and capabilities of native server file systems, PostPath Server enables the use of the open and standards-based high-availability tools leveraged in PostPath Server High Availability Edition v2, simplifying the implementation and management of email services.

New features to version 2 expand the number and types of high availability configurations supported. These include the choice of shared or replicated storage configurations, on or offsite redundancy configurations, synchronous or asynchronous replication configurations, virtual HA support, the ability to configure hot or cold failover, and support for Web mail and mobile devices.

PostPath Server High Availability Edition v2 is the latest addition to the PostPath Server family, a line of email servers that are network-protocol interoperable with the Exchange ecosystem.

PostPath Server High Availability Edition v2

Starts at $4,000 for 60 users, including native Outlook, ActiveSync, BlackBerry support, and redundant server

Email and collaboration server that can serve as a replacement or supplement to Microsoft Exchange

(650) 810-8100

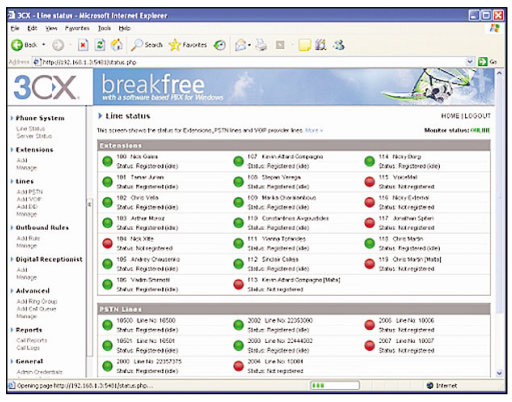
www.PostPath.com

PostPath EMAIL EVOLVED

MESSAGING & TELEPHONY JULY 18, 2008

Eliminate PBX Headaches

Replace Your Traditional Hardware PBX With The Feature-Packed 3CX Phone System For Windows



3CX Phone System includes a Web-based interface for configuration and presence status notification.

BREAK FREE FROM proprietary phone systems and move up to an open standard IP-PBX that increases employee productivity and costs less. Enable staff mobility with calls that can be made and answered seamlessly from outside the office and voicemail and faxes received via email. Globalize your business by connecting branch offices and redirecting local customer service numbers via the Internet to your phone system at negligible cost.

3CX Phone System for Windows is a software-based IP-PBX that replaces a proprietary hardware PBX. It supports most SIP phones, VoIP gateways, VoIP service providers, and PSTN phone lines. It is easy to manage as it integrates well with Windows network infrastructure.

The advanced phone system supports call switching, routing, and queuing; scalability to unlimited extensions and phone lines; easy management with Web-based configuration and presence status indication; unified messaging; auto attendant; and configurations for many VoIP providers. The new version also ships with call conference rooms, Windows 2008 support, paging/intercom, and other features.

3CX Phone System comes in four editions, all supporting an unlimited number of extensions. The Free edition can handle eight simultaneous calls; the Small Business edition supports up to eight; the Pro up to 16; and the Enterprise up to 32. Commercial editions have an extensive feature set, and call capacity can be expanded with upgrade packs.

3CX Phone System Version 6.0

Free edition available; Small Business Edition starts at $595

Software-based IP-PBX phone system with call switching, routing, queuing, and many other features

(800)687-0903

www.3cx.com

3CX

SECURITY JULY 18, 2008

Protect Online Apps

Imperva SecureSphere Web Application Firewall Helps Businesses Protect & Monitor Sensitive Data

WEB APPLICATION ATTACKS can produce devastating results ranging from high-profile data breaches to brand damage, lawsuits, and fines.

The Imperva SecureSphere Web Application Firewall is an accurate, effective Web application firewall. The SecureSphere WAF protects online applications against sophisticated application-level attacks such as SQL injection and cross-site scripting, prevents theft and leakage of data from online applications, and meets the PCI DSS (Payment Card Industry Data Security Standard) section 6.6 application security requirement.

The SecureSphere Web Application Firewall helps businesses better protect and monitor their applications and sensitive data. Imperva's Dynamic Profiling technology automatically builds a model of legitimate behavior and adapts to application changes over time, keeping SecureSphere's application defense up to date and accurate without manual configuration or tuning.

Deployed in minutes with no changes to the existing infrastructure, SecureSphere protects and monitors the complete application stack from the individual application to the server and network. Imperva's Transparent Inspection technology delivers multigigabit performance, submillisecond latency, and options for high availability that meet the most demanding data center requirements. For large-scale deployments, the SecureSphere MX Management Server centralizes and streamlines configuration, monitoring, and reporting.

The SecureSphere Web Application Firewall leverages multiple inspection layers and security defenses to provide the highest level of protection.

Imperva SecureSphere Web Application Firewall

Starts at $17,500

Protects online applications against sophisticated attacks such as SQL injections

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IMPERVA

NETWORKING & VPN JULY 18, 2008

Super Network Management

Entuity's EYE Can Increase Effectiveness & Productivity

At a glance, IT staff can view the status of the network from the Eye of the Storm dashboards.

TO DRIVE PROFITABILITY, today's networks must offer configurations and architecture that support a broad range of initiatives for business service management and service delivery. Entuity's Eye of the Storm (EYE) is a network management tool that dispenses the information IT operations personnel need to sustain real-time business imperatives, optimize the capacity and performance of network resources, and support the variety of operating systems within an organization. The newest release, EYE 2008 Service Pack 2, adds a number of features.

EYE 2008 SP2 includes support for current heterogeneous devices, including the Cisco SSL Proxy module and client support on Windows Vista. To help network managers and architects visualize and author network topology in a geographical content, the new EYE software suite includes an EYE Connectivity Viewer to add background images and export maps in Microsoft's Visio format. The new features let IT staff superimpose network models or troubleshooting diagrams over maps or schematics.

EYE 2008 SP2 also features expanded router protocol awareness that lets EYE automatically discover HSRP-active routers and their peers, collect performance data, present reports, and deliver alerts on operational anomalies and thresholds. The real-time reports and alerts let IT staff proactively optimize the operation of high-availability networks. With scriptable device renaming, EYE 2008 SP2 helps automate workflows to fit the strategies of network admins and power users.

Entuity Eye of the Storm

Starts at $50,000; current customers get SP2 free

Helps IT staff increase productivity by automating processes for business service management

(800) 926-5889

www.entuity.com

entuity

SECURITY JULY 18, 2008

Easier Database Monitoring & Auditing

Tizor Systems Mantra 6 Helps You Reduce Risk & Regain Control

MOST COMPANIES do not have a complete inventory of their databases or the types of data that exist within them. This lack of visibility creates risks that could lead to insider abuse, data breaches, or failure to pass a compliance audit. Tizor Systems Mantra 6 enables enterprises to regain control of critical data, IT budgets, and personnel resources.

Mantra's architecture balances technically sophisticated analytical capabilities with an intuitive user interface and easy-to-use policy language. Mantra 6 features include automated discovery for finding databases and specific classes of sensitive data; session termination for blocking unauthorized or suspicious database activity; and drag-and-drop policy creation for the fastest and easiest implementation of data auditing for risk mitigation.

Mantra 6 automates discovery tasks, quickly finding and classifying databases and the data within them to provide unprecedented visibility into the location of data assets, type of data assets in use, and potential risks to those assets.

Mantra's policy language allows technical or nontechnical users to create detailed compliance and security policies without the long learning curve typically associated with these tools.

Mantra 6 includes:

- Automated, best-in-class data discovery
- Non-inline blocking
- Drag-and-drop policy creation and policy wizards
- Behavioral Fingerprinting
- Content scanning
- Unstructured data

Tizor Systems Mantra 6

Provides real-time auditing, monitoring, and reporting of critical data assets

(978) 243-3200

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TIZOR™

SECURITY JULY 18, 2008

High-Performance Security

WIN Enterprises' PL-60760 Series Secures A Variety Of Networking Applications

EFFICIENT AND EFFECTIVE networking of devices, offices, and employees is vital to the success of any business, but it must also be secure. Getting a host of secure networking options in one package goes a long way toward that goal. The PL-60760 series of network security appliances from WIN Enterprises sports a bevy of features all packed into a 1U rackmount form factor.

The PL-60760 platform is ready-made to be deployed for applications such as IDS/IPS, firewalls, VPN gateways, NACs, and UTM (unified threat management). The time-to-market is designed to be as short as possible, so OEMs can put the appliance to use quickly.

Features of the PL-60760 appliance include four GbE ports with optional bypass options; four 10/100 Ethernet LAN ports; and a port each for USB, RS-232, and Mini PCI. System memory can be configured up to 4GB via DDR2 sockets. The device also has two PCI-X slots, a 16x2 LCM display, a four-button keypad, and an easily removable cover. The PL-60760 also sports one E-ATA and two SATA connectors and CompactFlash types I and II and operates on the Intel Socket 479 Core 2 Duo/Core Duo processor with the Intel 3100 chipset.

Supported operating systems for the PL-60760 include Windows 2003/XP/XP Pro/Vista as well as Linux distributions including Fedora/8, Redhat Enterprise Linux 5, and Cent OS 5.

Available configurations include the PL-60760A and PL-60760B. The former has four GbE Copper interfaces, while the latter has four SFP ports. There is also a control board version, the MB-60760, which also has four GbE and 10/100 LAN ports.

They can be customized to specifications and feature customer-specific bezel designs.

WIN Enterprises PL-60760

PL-6076A: $617; PL-6076B: $766

A network security appliance with short time-to-market that can be customized for OEMs

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CMS PRODUCTS

PRODUCT OF THE WEEK

The Defrag Experts

Diskeeper 2008 Dominates With InvisiTasking & Real-Time Defrag Features

by Chris A. MacKinnon

• • •

BUSY SMALL TO MIDSIZED enterprises sometimes don't think about disk fragmentation until it's almost too late. Sluggish systems caused by fragmentation are not appreciated even at the best of times. In fact, Michael Materie, director of product management at Diskeeper (www.diskeeper.com), says disk fragmentation is a major impediment to storage performance whether you are using local IDE and SATA drives, direct-attached SCSI disks in a RAID, or even SAN-attached disk arrays.

Well-Oiled

According to Materie, defragmenting disks is as vital as changing the oil in your car. "If you neglect the regular oil changes," he says, "after a while, your gas mileage deteriorates and eventually the engine blows up. It's very similar with fragmentation. Fragments accumulate over time, slowing down the computer until some time down the road, the computer starts to hang, and applications freeze up."

Materie says the realized benefits of defragmentation include faster and more productive users and computers; fewer calls to the help desk due to performance or reliability issues; longer drive life span due to less wear and tear; and computers that perform better, which can delay the high cost of purchasing new systems by months or even years, according to an IDC study. In addition, he says if you're running a virtual system or SANs, you'll save on the need to upgrade and add more new hardware, as the current hardware will operate more efficiently.

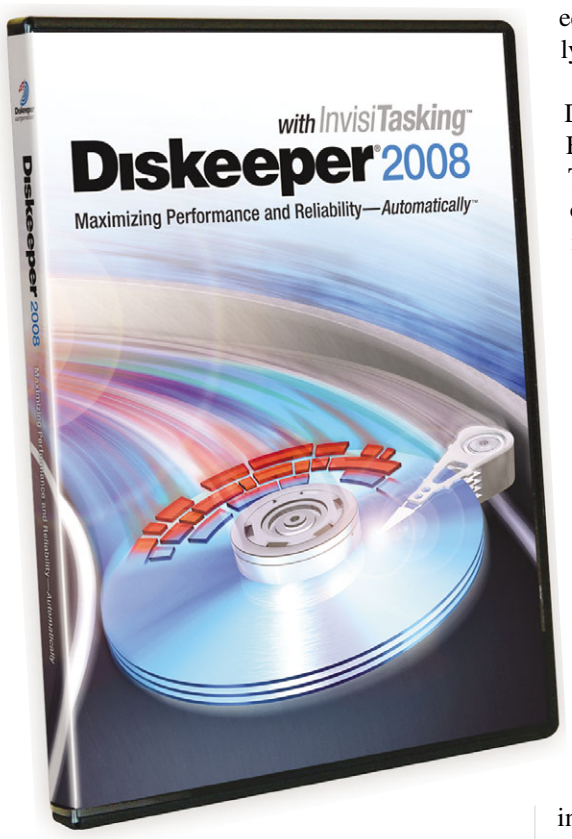
"Fragmentation starts at the file system level," Materie says. "The file system then has to generate additional unnecessary I/Os for each of the fragments and pass these into the storage subsystem. The result is increased overhead for the storage system to handle, and with the disk drives as the weakest link in a computer, the more wasted effort that has to channel through the disk, the slower the overall system will be."

Because many SMEs use virtual machines, Materie says it's also important to know that virtual machine environments compound fragmentation, as excess I/O generated by one VM (virtual machine) also affects the other VMs on the system that are sharing the same hardware. "It's vital to defragment virtual machine host systems as well as all the guest systems," he says.

The Benefits

Tons of defragmentation software are available to SMEs, so what is it about Diskeeper 2008 that sets it apart? Materie says it's a technology at the core of Diskeeper called InvisiTasking. "InvisiTasking is a technology that allows Diskeeper to defragment with zero overhead on a computer," he notes. "In past years, customers noted that defragmentation was resource-intensive and interfered with production. Scheduling a defrag process to nights and weekends worked in some cases but not others and certainly added management overhead to IT staff." Diskeeper defragments in the background invisibly so that systems can perform at a maximum without consuming extra resources. Gone are the days of defragmenting after hours in the enterprise.

Materie says to address customer feedback, Diskeeper pioneered various options to throttle the software's resource usage or run defrag only while screen savers were active, but none of these additions truly solved the customer problem. "Our lead engineers then went a step deeper and really investigated the NT Thread Scheduler used by the Windows operating system to allocate system resources to running processes," he notes. "That research noted significant drawbacks



in relying on that methodology to support what we wanted to provide our customers: invisible background operation. Born of that research project was InvisiTasking."

Materie says rather than letting the operating system scheduler allocate the entire computer system to each process one at a time in round-robin fashion, InvisiTasking causes the system to allocate its various resources (CPU, memory, disk, and network) separately to the processes that need each one. He says this allows overlapping use of separate resources, not just reducing system overhead but eliminating it altogether.

"The addition of InvisiTasking to the Diskeeper product several years ago revolutionized the defragmentation industry," Materie notes. "We knew we had a fantastic innovation and are now licensing the technology to other software manufacturers (see www.invisitasking.com), so they can revolutionize their respective industries with zero-overhead solutions."

Automatic Improvements

Another aspect that sets Diskeeper apart from its competitors is the fact that it's an automatic defragmenter. "With Diskeeper, files are defragmented on the fly using technology that allows that entire process to be completely invisible. It's important to delineate an automatic defragmenter from a manual or scheduled defragmenter because they are not the same," Materie says. "Automatic means that after installing the software, all defragmentation operations are handled automatically without any further management effort required. That equates to faster and greater ROI, especially over the long term."

Materie says yet another unique Diskeeper feature is I-FAAST (Intelligent File Access Acceleration Sequencing Technology), which optimizes placement of your most important data. This results in additional file read and write performance above defragmenting alone, typically a 10 to 20% improvement, he says.

Since July 22, 1981, Diskeeper (formerly known as Executive Software) has sold more than 30 million Diskeeper licenses to home users and large enterprises for speed and reliability on Windows-based laptops, desktops, and servers. Materie says some of the most common benefits that SMEs can expect to experience after installing the software include faster boot and load times and faster backups and antivirus scans. He says users will also typically notice boosted access times for Microsoft Outlook, Excel, or Word applications. In terms of reliability, Diskeeper also increases computer uptime and can extend a computer's life span up to three years. P

Diskeeper corporation

PRODUCT OF THE WEEK

DISKEEPER 2008

Description: Defragmentation software that automatically maximizes system performance and reliability

Interesting fact: Diskeeper once appeared in a question on the game show "Jeopardy."
Q: "Diskeeper is software to do what?"
A: "What is defragment."

(818) 771-1600
www.diskeeper.com

ESSENTIAL BENEFITS DISKEEPER PROVIDES

The following information, gathered from 254 Diskeeper customers, breaks down the benefits that customers get from using the Diskeeper product. The percentages are based on what customers said about each benefit.

Transparent defrag runs unnoticed: 78%
Reliability restored: 77%
Pushes system performance to its peak: 71%
Saves money and time: 71%
Eliminates costly hardware upgrades: 71%
Extreme condition defragmentation: 62%
Defends critical system files from fragmentation:.....61%
Speeds up virus scan and bootups: 35%

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Product Releases

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Clients

■ **IBM** has unveiled two new products in its InfoSphere data management portfolio: InfoSphere Information Server and InfoSphere MDM Server for PIM (Master Data Management Server for Product Information Management). MDM Server for PIM provides companies with the capabilities to distribute product information throughout the organization in order to streamline data management strategies. Enhancements include an improved user interface, improvements to the underlying technology, and easy integration with solutions based on a service-oriented architecture. The software is integrated with InfoSphere Information Server, so customers can take advantage of its data cleansing capabilities. InfoSphere Information Server is designed for banks, manufacturers, and retailers and helps companies better understand their customers. Features include extended global support for eight languages, improved grid deployment, and reusable services for data access.

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■ With today's push to "go green," one place businesses can start is by reducing their overall print waste. **Kyocera Mita America** announced two print management products provided by Equitrac. Equitrac Office and Equitrac Express work to simplify print-copy tracking and provide enterprises insight into document output volumes. The programs are available as an Equitrac Embedded program on select Kyocera MFPs or as a terminal-based offering. Equitrac Office is targeted toward enterprises and lets employees print securely while administrators track print activity and costs. Equitrac Express is designed for educational or other institutions that charge users for using the printer.

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■ **Lenovo** has released the ThinkPad X301 notebook with a 13.3-inch display, weighing less than 3 pounds and measuring about 1 inch thin. The X301 comes in 64GB or 128GB storage options and offers nearly 20% better performance over the previous X300 notebook through the use of DDR3 memory and Intel Core 2 Duo processors, Lenovo states. Additionally, the X301 includes new support for DisplayPort, a VGA connection, options for high-speed mobile broadband and Wi-Fi, and Bluetooth and Ultra-Wideband technology. Additionally, Lenovo says it has improved uplink performance by up to 250% for models with AT&T mobile broadband over previous ThinkPads. Models with WiMAX will start selling later this year. The X301starts at about $2,599.

Messaging & Telephony

■ **SECNAP** announced the Email Archiving feature for its Email Security Gateway Powered by SpammerTrap. The Email Archiving enhancement enables clients to archive both incoming and outgoing mail, and it's compatible with nearly all messaging systems, including Microsoft Exchange, Lotus Notes and Novell GroupWise. The Email Archiving feature is available with ENT- and GEM-model gateway appliances, as well as Premier-level hosted services. It provides user-convenient archiving with optional remote storage through add-on hot-swap storage or network-attached storage. Separate configurations are available for incoming and outgoing messages. The Email Archiving feature also facilitates compliance with federal regulations, such as the Sarbanes-Oxley Act.

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■ **Sherpa Software** released version 4.2 of Mail Attender for Exchange, which offers improved PST management. Mail Attender is a scalable content-management solution that automates the scheduling of common policies from a central location. The software helps companies address email management, storage, and compliance requirements that relate to regulations such as Sarbox, the new amendments to the Federal Rules of Civil Procedure, and others. Version 4.2 can automatically scan the contents of existing PST files and utilize a proprietary weight mechanism to determine the owner/mailbox. Mail Attender version 4.2 helps address compliance demands by accessing PST files, managing them, assigning the PST to a user, and moving the PST contents into that user's archive.

. . . . .

■ **VoSKY** has released what it calls the industry's first Skype-certified, enterprise-grade PBX-to-Skype gateway for SIP networks. The plug-and-play VoSKY Exchange Pro VISIP-EX is designed to let medium-sized and large enterprises get full value out of an IP PBX by connecting an IP PBX to Skype to reduce telecom costs and enhance communications within businesses, as well as offer interoperability with all of Skype's features and services. The VISIP-EX integrates with any existing IP PBX using SIP trunk ports and adds up to 30 lines for Skype use, letting users make and receive Skype calls from their regular office phones with no additional Skype software or headsets. VoSKY Exchange also gives administrators complete control of Skype within the network.

Networking & VPN

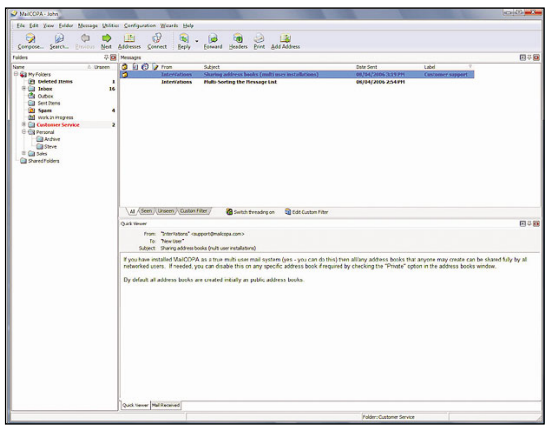
■ VPN-1 VE (Virtual Edition), an application designed to protect applications within virtual environments, is now available from **Check Point Software Technologies**. VPN-1 VE is designed to restore the separation and security of applications and does so as if they were still on separate servers. Other features include the ability to completely integrate a customer's Check Point security infrastructure so Check Point appliances and software for open servers, "Secured by Check Point" appliances, and

Go to Page 18

MESSAGING & TELEPHONY JULY 11, 2008

Handle Multiple Users & Email Addresses

InterVations' MailCOPA Email Software Simplifies Email



InterVations MailCOPA updates all shared email users in real time, displaying critical message information.

CHECKING VARIOUS EMAIL addresses of co-workers or looking through your own accounts can often be a time-consuming burden. InterVations MailCOPA v. 9 is a multiuser email program for Windows that can help you manage multiple email addresses. If you have a team of employees using multiple email addresses on multiple computers, MailCOPA ensures that all emails are secure, stored centrally, and available immediately to the people who need to access them.

MailCOPA can bring together each employee's emails from multiple accounts and make it easy to share emails across the network. MailCOPA lets a team of employees answer messages without the risk of emails being answered multiple times by different workers. MailCOPA updates all shared email users in real time, displaying information about which messages have been opened or replied to. The program provides a simple, efficient way to manage help desk tickets, technical support requests, and any information stream from clients and prospects.

The interface is customizable, and you can create macros and templates to personalize correspondence. Messages can be threaded for easy viewing or locked to ensure they won't be deleted.

InterVations MailCOPA

Starts at $39.95 for a five-user, single machine license; 30-day trial version available

Manages multiple email addresses, ensuring emails are secure and centrally stored

(508) 833-1660

www.mailcopa.com

INTERVATIONS Innovation on the Internet

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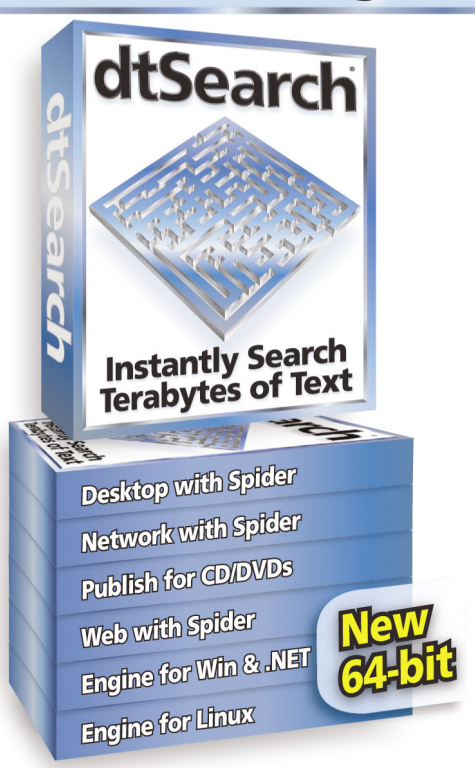

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Product Releases

Continued from Page 17

VPN-1 VE can be managed from a single interface. Possible benefits of VPN-1 VE include secure virtual environments tailored for VMware ESX or ESXi; elimination of the need for additional security appliances; and strengthened auditing, compliance, and risk management.

• • • • •

■ **Force10 Networks** has announced an increase of the C-Series deployment with the FlexMedia line card for network optimization. The combination of copper and fiber Gigabit Ethernet interfaces and 10 Gigabit Ethernet offers a traffic tool that requires no new significant investments. Additionally, the FlexMedia line card supports 36 to 384 line-rate Gigabit Ethernet ports. This cost-effective option guarantees line-rate throughput and continuous availability via the line card. Through the C-Series support for FTOS, process errors will not impact other processes. According to Cindy Borovick, research vice president for IDC's Data Center Networks service: "The flexibility provided by the combination of Gigabit and 10 Gigabit Ethernet interfaces on a single line card is an effective way for network managers to maximize the capacity of their switches given current needs, as well as anticipated future needs."

• • • • •

■ **SolarWinds** announced the latest version of its Orion APM (Application Performance Monitor) software, which lets users keep tabs on network performance. Orion APM v2 lets administrators tasked with maintaining the IT infrastructure view reports and monitor network elements, such as servers and applications. New features include expanded out-of-the-box templates and agentless architecture, the AppBuilder Wizard to help users generate custom application monitor templates, end-user experience monitoring, Universal WMI Performance Monitors, and the Performance Warning System. The Orion APM v2 starts at $2,995 for 50 monitors.

PHYSICAL INFRASTRUCTURE

■ **Cyber Switching** announced the EMC (Enterprise Management Console) with Virtual PDU (power distribution unit), which will be released in December. The software helps users manage and monitor devices that are deployed in remote and/or multiple locations. The EMC software lets you auto-discover, manage, and monitor all Cyber Switching products connected to your network infrastructure from one intuitive IP-based management interface without introducing additional hardware into your network infrastructure. The Virtual PDU allows the user to create a PDU that combines the real elements and functionality of separate PDUs into a single, user-managed "virtual" interface. It also allows the user to categorize outlets based on common or intended use rather than physical location.

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■ **Eaton** has introduced Pulsar M uninterruptible power supplies designed for energy savings and heat containment. The Pulsar M features the hot-swappable FlexPDU that frees up space in normally dense racks. You can replace or service the UPS without disrupting the power connection. Eaton offers the 2200 and 3000 VA models that include various depth sizes ideal for multiple rack enclosures. Both VA models feature the following: USB ports, serial ports, contact ports, mini-terminal block, RPO (Remote Power Off), ROO (Remote ON/OFF), HP OpenView integration, and optional SNMP/Web network management card. Additionally, the 3000VA XL model supports 12 battery packs and remotely reboots systems using Eaton's Powershare technology.

SECURITY

■ The new basic topcoat module for the Datacard MX6000 and MX2000 card issuance systems, designed to grant card issuers the flexibility to create unique card protection to meet their card program's requirements, is now available from **Datacard**. With high reliability, operational flexibility, and ease of use, the module is designed to coat the entire surface of a card with a clear or holographic topcoat that can be embossed and applied in combination with other Datacard products.

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■ RedSeal Security Risk Manager is now available in version 3.0. **RedSeal Systems** calls the software the first automatic reporting and auditing tool to assess compliance of Requirement 1 of PCI DSS (Payment Card Industry Data Security Standard). Going beyond manual network and firewall policy inspection, RedSeal SRM 3.0 automatically IDs traffic allowed among trusted and untrusted networks related to card transactions.

• • • • •

■ **Ringdale** announced Sentinel CardCreator, its identification card production software. CardCreator is scalable to fit any size of organization and may be installed on a standalone PC. Included in the CardCreator software are design templates and custom templates that can be easily generated. The software also incorporates biometric fingerprint technology, which captures the fingerprints of cardholders and saves them in the same database record.

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■ **Sunbelt Software** introduced the newest version of its CounterSpy Enterprise, which offers users protection against malware and spyware without bogging down the system. CounterSpy Enterprise v3.1 employs various techniques for examining potentially harmful files and is capable of flagging potentially unwanted programs. Features include advanced anti-rootkit technology, real-time monitoring with Active Protection, and configurable management dashboards. CounterSpy Enterprise is currently available starting at $155 for five machines.

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■ **Toshiba's** Storage Device Division has announced an alliance aimed at developing a standards-based solution for securely encrypting data on mobile computing platforms, including notebooks. The solution integrates Toshiba's HDD encryption technology, as well as an enhanced version of Wave's Embassy Trusted Drive Manager and Remote Administration Server products, which help manage and administer encrypted hard drives.

SERVERS

■ **Rave Computer** has announced its server, the Rave/Sun Ultra 24 Hybrid. The Rave/Sun is a redesigned 3U variation of the Sun Ultra 24 and retains the functionality of its predecessor. The Rave/Sun features a variety of processors (Intel Core 2 Duo, Intel Core 2 Quad, or Intel Core 2 Extreme quad-core). It also supports full-length/height PCI cards and up to 4TB of hot-swappable drives and is environmentally friendly, ultra-quiet, and easy to clean.

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Product Releases

■ **Sun Microsystems** launched two high-performance computing Intel Xeon-based Sun Fire servers, the Sun Fire X2250 and Sun Fire X4250. The servers support one or two dual- or quad-core 5200 or 5400 series Xeon processors and are capable of running on Solaris 10, Linux, and Windows. The Sun Fire X2250 server is a 1U server ideally suited to demanding MCAE, EDA, and energy and financial service applications. Features include support for low-power Intel Xeon Processor 5400 series CPUs; fast FSB and CPU speeds; and record-breaking integer, floating point, and integer throughput scores on SPEC CPU2006 benchmark. The Sun Fire X4250 server is a 2U enterprise-class system that supports up to 16 SAS disk drives, 16 memory slots, and six PCI Express slots. The Sun Fire X2250 and X4250 servers are currently available starting at $1,495 and $3,195, respectively.

Storage

■ **Brocade** introduced the Brocade 8Gbps SAN (storage area network) Switch for the HP BladeSystem c-Class portfolio. The next-generation, high-performance data center solution increases the network bandwidth of the HP BladeSystem c-Class technology and increases flexibility while helping reduce costs through rack consolidation, shared power and cooling, less cabling, and fewer required SFP (small form-factor pluggable) optics modules. Providing performance-enhancing features in 12 or 24 auto-sensing ports, the new switch supports legacy lower-bandwidth storage products for investment protection. It also offers the option to scale to larger fabrics on a "pay-as-you-grow" basis, increasing productivity while substantially reducing costs.

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■ EasyEncrypt Upgrade Kit, an upgrade utility for notebook computers with SATA hard drives, is available from **CMS Products**. Easy Encrypt is designed to enable notebook users to replace non-encrypted disk drives with secure ones that feature state-of-the-art encryption. The upgrade is designed to be quick and easy. Data is protected by AES 128-bit encryption, and Easy Encrypt also supports BIOS-level ATA password protection. All aspects of a hard drive, including the operating system, applications, data, and personal settings, are transferred.

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■ **Diskeeper** announced Undelete 2009, providing real-time data protection and instant data recovery. Undelete 2009 performs immediate restoration of files on desktops or servers invisibly in the background, using Diskeeper's proprietary InvisiTasking technology. Undelete 2009 replaces the Recycle Bin with a Recovery Bin, which captures all data, even those files commonly missed by the Windows Recycle Bin, including files that have been overwritten or deleted over a network. In addition, Undelete's real-time protection surpasses the occasional data protection provided by Windows Volume Shadow Copies, removing all gaps from the data protection strategy to ensure data is never lost. Key features include the ability to completely erase sensitive files, version protection for Microsoft Office files, and a desktop client.

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■ A virtualized storage management interface is available from **iStor**. The integraSuite/MC Management Center offers user control via a Java-based GUI, a command line interface, or Microsoft's VDS. It pools storage for easy allocation of resources, rather than requiring the user to manage individual RAIDs and LUNs. Volume expansion and RAID type migration are just two of the operations integraSuite/MC Management Center simplifies.

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■ **Network Instruments** has released the GigaStor SAS featuring a 288TB capacity. As the largest RNA (retrospective network analysis) platform for storage and network packers, the GigaStor SAS increases the monitoring capabilities of 10 Gigabit networks. Network Instruments also offers a line of GigaStor appliances including 4 to 12TB standalone units and write-to-SAN options.

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■ **Nexsan** announced The Edge, a next-generation green NAS (network attached storage) solution configured and priced specifically for the SME market. The Edge is a high-density disk storage solution that allows users to tier existing Nexsan SAS- and SATA-based storage with file services, CIFS (Common Internet File System), and NFS (Network File System), as well as block service iSCSI. The Edge was designed for the SME customers that demand green data storage solutions that maintain high performance with proven enterprise-class reliability. In addition, the Edge incorporates next-generation MAID (Massive Array of Idle Disks) 2.0 functionality, which enables dramatic energy savings without compromising application performance or reliability.

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■ **Quantum** added a 320GB capacity point for its GoVault Data Protection solutions, which doubles the previous capacity. The GoVault solution is a disk-based, all-in-one storage platform that includes Quantum's Data Protection software application for Windows that utilizes a data deduplication technology to reduce the number of cartridges required for effective backups. With the deduplication technology and an expanded choice of capacity sizes ranging from 40 to 320GB, the GoVault cartridge delivers twice the capacity of previous releases. And by only storing changes to files, the GoVault solution enables backups to be completed in minutes with transfer speeds up to 34MBps. Its ruggedized, sealed hard drive cartridges can be removed for offsite data protection, and they are designed to withstand up to a 1-meter drop on hard surfaces.

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■ **Sans Digital** has announced its two-bay storage enclosure, the TR2UT-B, which will complete its TowerRAID series. The RAID enclosure will support both USB 2.0 and eSATA connections, and feature four different RAID modes (RAID 0, 1 Spanning, and JBOD). The enclosure maintains hard drive ventilation with a dust-free front panel, and eliminates excessive cord clutter with a cable-less backplane design and by connecting up to two hard drives with a single cable.

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■ **Tabernus** has added Secure Erase support to its E800 Eight-Bay and E300 Three-Bay Erasure Tools. Beyond the Erasure Tools' existing ability to securely wipe EOL data from hard drives, Secure Erase taps a firmware function in compatible SATA and PATA drives for more comprehensive data elimination. Users will be able to choose Secure Erase or existing one-, three-, or seven-pass overwrite methods.

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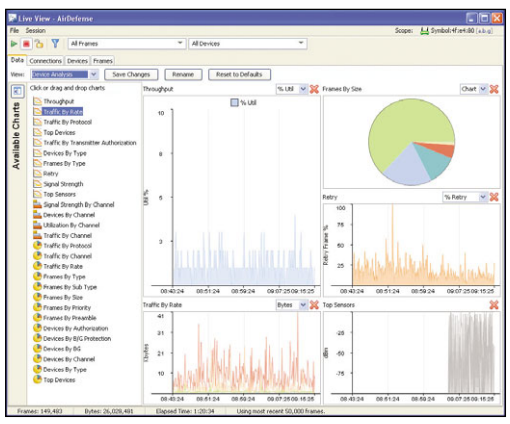

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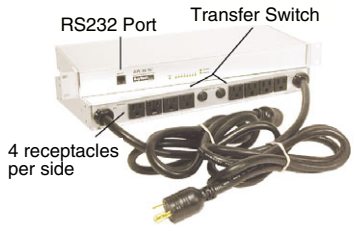

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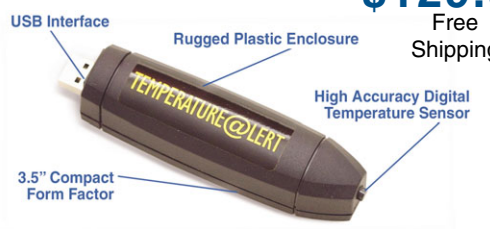

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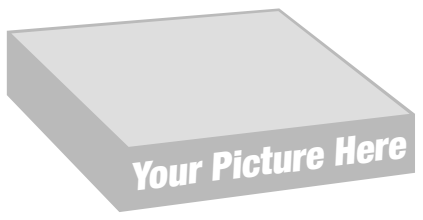

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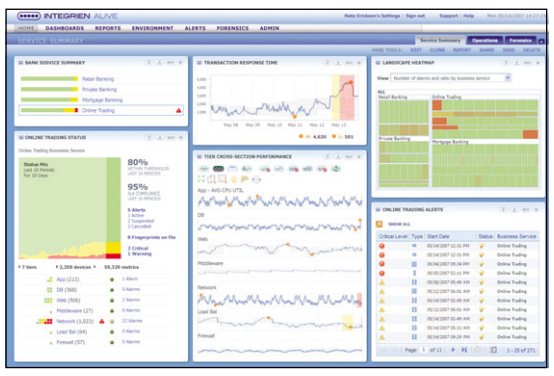

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Breaking In New IT Staff

Get Started Right Away When Integrating Tech Employees

by Carmi Levy

• • •

If first impressions are everything on a first date, they matter even more for IT managers bringing new employees onboard. You can't simply expect new IT hires to show up on their first day and know what to do. A well-defined process for integrating them is crucial for their long-term career success.

Unfortunately, many IT departments lack standards for bringing new staff in. IT leaders may assume that recruitment and hiring is strictly a human resources responsibility. They also assume it's business as usual for both IT and HR once the job offer is accepted. So new employees often show up on day one and are forced to fend for themselves.

Aside from ensuring telephones, computers, and system accesses are in place before the new hire's first day, IT managers must make sure rookies have access to the right people and resources. "If new employees can't get access to the tools they need to do their job within a reasonable amount of time, there can often be flow-on effects elsewhere in the organization," says Warren Shiau, lead analyst of IT research for The Strategic Counsel (www.thestrategiccounsel.com).

What It Costs The Organization

Ineffective personnel management processes often take root right from the start, so improvements here can lay the groundwork for better downstream practices, as well. "If newly hired employees don't see a smooth process for integrating into their new role, that tends to negatively affect them right off the bat," says Shiau. "They're not doing what they were hired to be doing, and it only gets worse from there if it isn't addressed."

Ineffective onboarding, or integrating new employees into your organization, impacts the organization in a number of ways. Poorly oriented or trained employees take longer to hit their stride. They consume more resources from elsewhere in IT and the company at large and are less productive. Because it takes them longer to begin pulling their weight, this drags both the bottom line as well as their colleagues.

Employee satisfaction is impacted, which can drive turnover, as well. Negative and unchecked first impressions make it easier for new hires to quit before they feel they've laid down roots.

Go to Page 24

When Onboarding Goes Bad

The telltale signs of ineffective new employee integration are easy to identify. They include the following:

- The employee becomes very quiet and starts alienating himself from others.
- Cell phone use goes up as breaks become more frequent.
- Absenteeism and late arrivals or early departures increase.
- Productivity flattens or declines.

Left unchecked, this can lead to larger-scale organizational impacts such as increased turnover, delayed project delivery, and compromised budgets.

The Best "Best Practices" Are The Simplest Ones

Onboarding processes are more likely to be adopted across the IT organization if they are clear and straightforward. Claire Colley, president and CEO of AReS Staffing (www.aresstaffing.com), advises IT leaders to consider the following best practices for bringing new hires into the organization:

- **Have the workstation ready.** Employees need a proper place to work as soon as they arrive on the first day. Beyond ensuring the physical office is properly set up, also ensure system and phone accesses are in place. "It may seem like a simple thing," says Colley, "but employees want and need to feel comfortable from the moment they arrive."
- **Assign a mentor.** Don't let new hires navigate their probationary periods alone. Mentors provide important and accessible guidance throughout the integration period.
- **Schedule an orientation.** Explain organizational and departmental policies and procedures, conduct an office tour, and introduce the new hire to colleagues, as well as the senior management team.
- **Review security.** Don't just hand the new employee a security pass. Review procedures and expectations, walk through specific scenarios, and answer any questions about system and physical site security.
- **Document the plan.** The employee's immediate manager should draw up a detailed schedule for at least the first week or two. Toward the end of this period, focus on transitioning to ongoing workflow.
- **Communicate.** Because most problems manifest themselves within the first month, ongoing two-way communication can help managers identify and address issues before they spin out of control. Informal one-on-one sessions raise employee confidence levels and keep managers more involved. "Communication really is paramount—and often ignored," says Colley. "Nine times out of 10, small problems can be nipped in the bud before they escalate so much that the employee decides to leave."

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Support for Linux migrations includes P2P (physical-to-physical) and V2P (virtual-to-physical) capabilities. P2V (physical-to-virtual) is supported for 64-bit Windows environments, and Citrix support includes X2P (anywhere-to-virtual) and V2I (virtual-to-image). PowerConvert's incremental imaging enables users to import and export images from a repository of server workloads, improving backup and disaster recovery and reducing costs.

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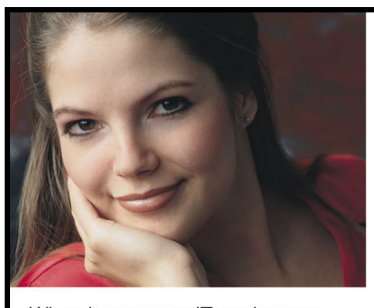

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Energy Efficiency Rebates

Money & Power Savings For The Data Center

by Sandra Kay Miller

• • •

Data centers are experiencing many issues around managing their energy consumption. Increased computing capability has led to a bigger demand for power and cooling. But with a steep rise in energy costs, coupled with the push to get "greener," data centers are making significant investments in energy-efficient technologies. At the same time, power companies are offering incentives and rebates for organizations to upgrade to power-saving equipment.

"It's a win-win for both the customer and the utility company," says Rob Bednar, spokesperson for Emerson Network Power (www.emerson.com).

Incentives For Rebates

While energy customers reap the financial benefits from rebates and using less power, utilities are able to also save money by not having to purchase expensive power from other utilities when they don't have the generating capacity to meet their customers' needs on peak demand days.

Mark Bramfitt, market supervisor for the PG&E's (Pacific Gas & Electric Company's) high-tech, biotech, and healthcare industries, agrees. "I know it's counterintuitive to people who see us trying to sell less of our product," he says. "The easiest way to explain it is if I can buy a kilowatt-hour of energy efficiency (in other words, help a customer use one kilowatt-hour less than they otherwise would), that's cheaper than going out in the generation market to buy a kilowatt-hour."

Bramfitt points to another reason for data centers and utilities to work together in order to reduce overall energy consumption: rolling blackouts. "We don't want to get in to that situation again, and to avoid that, we must deliver energy efficiency services at levels we've never had to do before," he notes.

Over the last year, Bednar has witnessed many more utility companies establishing rebates specific to the data center in addition to their existing consumer and business incentive programs. This is a trend he expects will continue as energy savings in the data center becomes more prevalent with the growing awareness in regards to power and cooling costs within organizations.

Bramfitt believes that PG&E has been very successful in helping companies manage their data center's air-conditioning systems but sees the gap in the equipment in the racks. To move ahead, the utility has entered into a partnership with leading equipment manufacturers.

"Typically, the people responsible for installing and maintaining IT equipment in the data center weren't the same as the people who paid the utility bills, so there wasn't an incentive to maximize energy efficiency in any of the decisions," says Bednar. "We've seen a trend over the last two years where those two groups are working together or are under the same budget, and that's one of [the] things that is helping to raise the awareness and increase the overall usage of energy-efficient equipment."

How Much?

The primary form of incentive for energy-efficiency upgrades can be a direct payment from a utility, equipment supplier, or state agency. Additionally, many states, as well as the federal government, offer tax deductions or credits for attaining defined levels of efficiency or for supporting specific energy-saving technologies.

Rebate levels vary widely within the United States, but the ACEEE (American Council for an Energy Efficient Economy) estimates that rebates usually cover from 15 to 35% of the installed cost of an energy option, with a renewable energy, such as solar, reaching as much as 50%.

Although every utility is a little different, by and large, the programs are pretty standard. For example, Austin Energy (www.austinenergy.com) has a Power Saver Program specific to data centers that are planned or are being built within its service area. All sizes of data center infrastructure are eligible, from large-scale enterprises down to server closets. The program also covers retrofits and remodels. Companies can obtain rebates up to $200,000 with the purchase and installation of UPSes, chillers/cooling towers, MAID storage systems, virtualized servers, and thermal energy storage systems.

"The typical equipment that we have seen our customers get rebates for is our precision cooling equipment, which can save as much as 30% energy over traditional cooling methods," says Bednar. Emerson has been working to enhance the energy efficiency of its products with technologies such as VFD (variable frequency drives) on the fan motors. VFD-equipped products better match the cooling fan capacity with the IT equipment and can ramp up or down the fans based on cooling needs. Additionally, Emerson has developed variable-capacity compressors that operate similarly. "We're seeing a lot of rebates for these types of products that help prevent overcooling," Bednar notes.

Finding Savings

While the West Coast, especially California, has been progressive in terms of offering energy-efficiency rebates, Bednar is seeing the trend expanding. "We've been working with utility companies quite a while, but over the last year we've been seeing momentum pick up across the country."

For organizations planning or building new data centers, as well as those involved in significant remodels to increase energy efficiency, it could very well pay to contact your power supplier to inquire about rebate programs. "Currently, many utility companies are establishing teams to help their customers. They may be able to offer help such as design and engineering resources, as well as practical advice on evaluating energy needs," Bednar notes.

Another excellent information resource for state, local, utility, and selected federal incentives that promote renewable energy and energy efficiency is the Database of State Incentives for Renewables & Efficiency (www.dsireusa.org). Composed of a database updated weekly, it lists available programs, technologies, and links for additional information, and it is an ongoing project of the Interstate Renewable Energy Council, which the U.S. Department of Energy funds and the North Carolina Solar Center manages.

However, the ACEEE does warn that power company- and government-funded rebates are not guaranteed. Often, they rely on the accessibility of funding and may also be handed out on a competitive ranking system. Due to the volatility of the energy market, the ACEEE suggests applying for rebates in the planning stages of construction or upgrades but not including potential rebates in the installation budget.

Energy Rebate Tips

- Start working early with the utility.
- Stay current with your power and cooling vendors' latest energy-efficient products.
- Perform a cost-benefit analysis to verify that the rebate combined with the long-term savings is worth the investment.

Available Efficiency Incentives & Rebates

Program/URL	Incentive Type	Eligible Technologies	Maximum Incentive
Energy-Efficient Commercial Buildings *www.efficientbuildings.org*	Corporate Tax Deduction	Equipment insulation, water heaters, lighting, lighting controls/sensors, chillers, furnaces, boilers, heat pumps, air conditioners, CHP/Cogeneration, caulking/weather-stripping, duct/air sealing, building insulation, windows, doors, siding, roofs	30 cents to $1.80 per square foot, depending on technology and amount of energy reduction
New York State Energy Research & Development Authority *www.nyserda.org*	Industry Recruitment and Support	Computer servers and systems	Varies by project and category; Advanced Concepts Data Center Project: $500,000 maximum, preferred cost share of 50%
Oncor Data Center Energy Management Program (Texas) *www.oncor.com*	Utility Rebate	Lighting, virtualization, high-efficiency UPS and HVAC system upgrades	Demand reductions: $150 per kilowatt; energy usage: $0.0175 per kilowatt hour
Puget Sound Energy— Commercial HVAC Equipment Energy Efficiency Rebate Program (Washington) *www.pse.com*	Utility Rebate	Boilers, programmable thermostats, motors, motor-ASDs/VSDs, HVAC	Varies based on HVAC equipment, from $50 to $800
Southern California Edison *www.sce.com*	Utility Rebate	Lighting, HVAC, controls and processes	5 to 14 cents per kilowatt hour; maximum incentive is $2.4 million annually, per customer site

Breaking In New IT Staff

Continued from Page 23

Improper orientation of new employees can impact operations within IT, as well as those in other areas of the company. "You've hired someone to do a certain job, but as long as they're not able to fulfill the scope of that role, you're getting no return on your investment," says Shiau. "The longer it takes for an employee to get up to speed, the greater the direct and indirect cost to the company."

Inefficient onboarding maturity often mirrors inadequate offboarding, as well, says Shiau. Lack of processes for terminating system access when employees exit the organization can open up significant security vulnerabilities.

Define Your Process

To ensure a consistent experience for all new hires, consider implementing the following best practices in your own shop:

Focus on roles. Document the predetermined processes and rights that apply to each role within the IT organization. This accelerates setup procedures when placing access requests for new employees.

Look at software. Although onboarding is more of a process challenge than a technological one, some organizations may benefit by tracking activities with dedicated software packages.

Adjust your timing. Get the wheels in motion well before the employee actually shows up. If it takes three weeks to execute all system access requests for new employees, ensure requests are submitted at least that long before the employee's first day.

Shiau says although it may be tempting to throw technology at the problem, this may be short-sighted. "Efficient onboarding isn't really about technology as much as it is about the underlying processes and your organization's ability to understand and know what's going on within those processes," he says. "You've got to know where the roadblocks are. Then, once you've got the process mapped out, you can decide if and where you're going to apply technology to improve that process or workflow."

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SIX QUICK TIPS

Keep Your Cool

Tips For Finding & Fixing Data Center Hot Spots

by Robyn Weisman

• • •

DURING SUMMER, DATA CENTERS can be the hottest places around. And even though you might keep your server room at arctic temperatures, you still run the risk of overheating pieces of your equipment. Data center hot spots can result from a misplaced server blowing hot in a corner, and even worse, you might not discover the problem until it has baked one of your storage drives.

A proactive strategy is best for handling this issue, and fortunately, there are several easy fixes to improve your setup.

Make Sure Your Basic Setup Works

Lennart Stahl, senior product manager at Liebert Precision Cooling (a division of Emerson Network Power; www.liebert.com), says that first off, you should make sure the basics of your setup work. You should be using a hot-aisle/cold-aisle alignment in your data center, and your CRAC (computer room air conditioner) units should be located at the end of hot aisles to lessen air travel and keep hot air from being pulled down into the cold aisles as it returns to the air conditioner.

In addition, make sure that air flow obstructions, such as cables under the raised floor or in the air ducts, are removed or at least kept to a minimum. "These basic steps will help you avoid hot spots before they happen," Stahl says.

Plug Holes

Thomas Zimmerman, vice president of network infrastructure at data center solutions provider Cavern Technologies (www.caverntechnologies.com), says to plug your spaces with blanking panels or foam rubber. "When you have spaces between your servers in a rack, cold air can flow around the top or side of the server without actually passing through the server, decreasing your efficiency," Zimmerman says. "If blanks are not available, use foam rubber to plug empty spaces between servers and on the sides of the rack. This process will force the cold air though the server more efficiently and help save on cooling costs."

In addition, make sure you plug holes in your raised floor and put vented tiles in the right places, says Dean Nelson, director of global lab and data center design services at Sun Microsystems (www.sun.com). "Leaks in your cold air plenum decrease the efficiency of your cooling system," he says.

Use Portable Cooling To Control Hot Spots

Joe Armshaw, area manager at Atlas Sales & Rentals (510/713-3313; www.atlassales.com), recommends using portable cooling equipment as a less expensive alternative to upgrading your entire cooling system, particularly if you find you only have one or two hot spots to remove. With dedicated cooling directed at these individual spots, you will decrease the load on your entire system.

"Most data centers have sufficient cooling throughout the floor area with the exception of certain racks that produce more heat," says Armshaw. "Because this heat is different than the rest of the data center load, the use of portable cooling will keep this area from affecting the efficiency of the data center system."

Strategically Cut Down Hot Spots

Most solutions for finding and fixing hot spots are technical in nature; however, taking a strategic approach has the potential to eliminate entire swathes of hot spots in the data center, says Jered Floyd, CTO at enterprise archiving solutions provider Permabit (www.permabit.com).

For example, primary storage farms typically run hot because they are designed to have data at the ready. But too often, data is kept on primary storage long after it could be moved off the primary tier, taking up space and requiring more energy. "In order to remedy the data center hot areas caused by suboptimal storage of fixed content, data center managers should identify unchanged data on primary storage and move it to a more energy-, space-, and cost-efficient tier of storage," Floyd says.

Floyd suggests you identify data that has not been accessed in 90 days or more and move it to a deduplicated disk-based archive. Power-efficient archives should include features such as advanced power management and spin-down disks. "You'll be storing significantly less data, using cost-effective storage [that is] less than $5 per gigabyte, and consuming much less energy," Floyd says. P

Best Tip:

Conduct A CFD Assessment Of Your Data Center

Lennart Stahl, senior product manager at Liebert Precision Cooling (a division of Emerson Network Power; www.liebert.com), says the first thing you should do is conduct a CFD (computational fluid dynamics) assessment of your data center. "A CFD assessment shows exactly how airflow is occurring in the data center and how changes in the space—new equipment or alignment, for example—affect that airflow," he says.

According to Stahl, a CFD model checks the heat output of each of your servers and all additional equipment in your data center, along with all the cooling from the precision cooling systems. This information builds an image that tracks airflow and temperatures and identifies areas where heat is an issue or where excessive cooling is creating inefficiencies. "This kind of detailed understanding allows data center managers to make informed decisions on everything from rack alignment to server use and additions to power and cooling infrastructure," Stahl says.

For his part, Thomas Zimmerman, vice president of network infrastructure at data center solutions provider Cavern Technologies (www.caverntechnologies.com), recommends getting your hands on a thermal imager to help you conduct your CFD. He likens the image it provides to a real-time weather map. "If there's a giant red ball by a server, for example, you can do stuff to fix it and then see if in fact you have fixed it," he says.

Zimmerman says that thermal imagers cost at least $10,000 but that many resellers will often take a before and after image for you. "Tell them you're thinking of upgrading your cooling and [ask if they can] do an assessment," he suggests. As an alternative, you can also rent thermal imagers from about $200 per day, depending on the reporting and other services that come with the rental.

Most Counterintuitive Tip:

Turn Up The Thermostat

Dean Nelson, director of global lab and data center design services at Sun Microsystems (www.sun.com), says that studies indicate increasing your set point temperature by just one degree Fahrenheit can save 4 to 5% of room energy. Raising set point from 68 F to 72 F could save 15 to 20% of the cooling energy while still keeping air inlet temperatures well within computer manufacturer specifications. In fact, ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers; www.ashrae.org) recommends modern data center set points be set as high as 78 degrees Fahrenheit, a huge savings when compared to 68 to 72 F.

John Bennett, worldwide director of data center transformation solutions for HP (www.hp.com), explains that modern technology enables server/storage systems to run at much warmer temperatures. Most customers keep the data center much too cold and spend more energy than needed for cooling. Work with your vendor's support staff to determine just how warm you can run things and use best practices such as hot and cold aisles to minimize power and cooling costs.

BONUS TIPS

■ **See if your cooling tower can use evaporative cooling.** Dean Nelson, director of global lab and data center design services at Sun Microsystems (www.sun.com), points out that low-humidity locales such as Nevada, parts of Texas, Arizona, and California often have 90+ degree days with minimal humidity. Data centers situated in these places can take advantage of evaporative cooling as an energy-efficient means to minimize hot spots.

■ **Optimize what exists.** John Bennett, worldwide director of data center transformation solutions for HP (www.hp.com), says that one of the cheapest and most effective ways to prevent wasted electricity is to ensure that the warm air coming out of one device isn't directed to the air input of another. This not only prevents the heat from one device from causing another to overheat but better balances cooling (with lower costs) and reduces technology risks, as well.

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WHAT'S HAPPENING

How Good Is Your Security?

Sourcefire Improves How SMEs Minimize Network Threats & Attacks

by Julie Sartain

• • •

How would you rate your current security solution? Is your IPS (intrusion protection system) technology frequently criticized for the number of alerts it produces? Are you constantly battling to keep the IPS tuned? What's the answer?

Sourcefire (www.sourcefire.com), founded in 2001 by Martin Roesch, the creator of the open-source project Snort, develops enterprise threat management products that help organizations manage and minimize network security, threats, and risks before, during, and after attacks. The company's flagship Sourcefire 3D System provides users with an intuitive solution that helps automate network protection through its innovative adaptive IPS capabilities.

Sourcefire maintains close ties to the open-source community. Besides the Snort open-source project, the company has launched additional community-based projects such as OfficeCat, a freeware utility that detects potentially compromised Microsoft Office files, and ClamAV, an open-source antivirus and anti-malware project.

How It All Works

"Sourcefire believes that network security is more effective when you know more," says Mike Guiterman, director of open-source products at Sourcefire. "Our Vulnerability Research Team (VRT) takes it a step further; their motto is 'Know everything.'"

Sourcefire uses a variety of methods for collecting up-to-date vulnerability information, notes Guiterman. These methods include public and private vulnerability feeds; deep connections with the open-source and vulnerability research communities; intelligence gathered from customers, partners, honeypots, Web crawlers, and botfinders; and information gleaned from monitoring underground activity.

Once the VRT verifies a new vulnerability, it uses a detailed, methodical process for developing effective rules. First, it models the environment; that is, it sets up and installs the "victim" environment. Next, it finds the triggering conditions, which means it determines what conditions need to be present in order for an attack to be successful.

The next step is to model the protocol so the team understands transport. Then it verifies everything and runs many tests. The VRT runs regression and false-positive testing with more than 150 million checks to ensure detection and minimize false positives, adds Guiterman.

The results of this process are rules designed to detect attempts to exploit vulnerabilities instead of exploits. It's a subtle but critical difference. With exploit-based rules, developers are limited to the world of existing attacks—that is, they need a sample of the exploit to write the rule, and they're virtually blind to any new exploit or variant of an existing exploit. "With vulnerability-based rules, we can detect every attack against a given vulnerability, every time, whether the exploit is known or not," says Guiterman.

R&D

One of Sourcefire's most critical R&D areas is its customers. Sourcefire uses the open-source Snort community as its Vulnerability Research Team, says Guiterman. Security isn't static; it's a dynamic environment based on newly discovered vulnerabilities and constantly evolving threats. Security products require regular updates to ensure that they provide protection in a dynamic environment.

The VRT is primarily responsible for producing up-to-date detection rules for Sourcefire's commercial products and open-source Snort users. On average, notes Guiterman, the VRT produces a new Snort Rules update about twice a month. In addition, the team is responsible for producing up-to-date detection signatures for ClamAV, Sourcefire's open-source anti-malware solution. The ClamAV signature database is updated multiple times a day.

"In short," says Guiterman, "these groups of dedicated researchers are the individuals who ensure that our commercial products and our open-source projects provide the highest level of protection against the latest network security threats."

The Sourcefire engineering teams and the VRT developed a feature called RNA (Real-time Network Awareness)-Recommended Rules. "Simply put, this feature can recommend a subset of the VRT Certified Snort Rules set to be turned, based on what's on the network and the needed levels of security," Guiterman notes. By using these RNA-Recommended Rules, Sourcefire customers can overcome the "noise level" most IDS/IPS products on the market today generate.

One customer, a major healthcare company, reported seeing a 62% reduction in alerts simply by enabling the RNA-Recommended Rules, notes Guiterman. "They went from 110,000 alerts per week down to 42,000 alerts per week, simply by following the Webcast instructions for using RNA-Recommended Rules," he says.

About Snort

Sourcefire recently announced the open-source beta release of SnortSP (Snort Security Platform). This is the first phase in a total re-architecture of Snort.

The simplest definition of SnortSP is a common platform for aggregating and processing network traffic that can then be passed to multiple detection engines such as Snort, Sourcefire RNA, or other third-party detection applications, Guiterman notes. Parsed network traffic can be passed either serially or in parallel. Breaking Snort into an extensible platform and distinct detection engines enables an entire host of new features and performance improvements.

SnortSP is a multithreaded application designed to take advantage of today's multi-core hardware. It's designed to be accelerated, and it offers default support for network protocols including IPv6, MPLS, and GRE. SnortSP is much more efficient than traditional solutions; for example, traffic only has to be decoded once, and then all detection technology can use SnortSP.

Guiterman says SnortSP ships today with the Snort 2.8.x detection engine. The Snort 3.0 detection engine will be purpose-built on this new platform and will ship sometime next year.

Guiterman says, "Even though Snort is still the standard by which all IPS products are measured, Sourcefire will be re-architecting Snort to be the de facto standard for the next 10 years." P

THREE QUESTIONS

ElcomSoft Recovers Lost Passwords, Audits Security

Regain Access To Protected Data, Applications, Systems

by Daniel P. Dern

One indication of the challenges of heightened computer security, according to ElcomSoft, is that nearly half of support calls to IT are related to lost or forgotten passwords, with each incident costing the company an average of $30 to $50 to resolve.

Established in 1990, ElcomSoft (+7 495 974 1162; www.elcomsoft.com) specializes in producing Windows productivity and utility applications for businesses and individuals for password recovery, forensics and investigation, password audit, and electronic discovery.

Today, the Moscow, Russia,-based company has customers throughout the United States and around the world, including Fortune 500 corporations such as Microsoft, Adobe, IBM, Cisco, Bank of America, Equifax, Boeing, and AT&T; forensic agencies; military and governmental institutions, such as the FBI, CIA, and the U.S. Army, Navy, and Department of Defense; and thousands of end users.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

"With growing government and industry regulations regarding computer and data, coupled with near-daily headlines of lost and stolen data and unauthorized computer access, IT is becoming increasingly aware of the need to ensure security, including through password-based access and encryption for files, applications, and systems," says company CEO Vladimir Katalov.

But, notes Katalov, "Most small to midsized companies today do not have the IT time or facilities to implement appropriate security policies to prevent data leakage or hacker attacks. And even where password protection is in place for files and systems, these companies often don't adequately train users on proper password policies or conduct password audits." This, says Katalov, "can result in password-locked documents, tables, archives, applications, and systems that nobody knows the password for."

Reasons for unavailable passwords can be that the user can't remember, lost, or even maliciously changed them, or the user is unavailable when access is needed due to vacation, illness, termination, or even an untimely death.

■ What should *Processor* readers know about your company's products?

"ElcomSoft's software makes it easier for organizations to recover lost passwords from Windows and Unix operating systems, Microsoft Office products, Adobe PDF files, ZIP and RAR archives, and other applications without needing to own and use expensive hardware," says Katalov. "Our products can recover passwords for [more than] 100 different applications. Our bootable System Recovery CD or flash drive can unlock Windows accounts within minutes; reset account passwords, including Domain Admin; unlock and enable user and administrative accounts; and assign administrative privileges to any user account."

ElcomSoft password recovery products include ElcomSoft's Password Recovery, ElcomSoft Password Recovery Bundle, and ElcomSoft Distributed Password Recovery. In addition to password recovery tools, ElcomSoft also offers a tool that performs security policy audits, Proactive Password Auditor, and a program to recover EFS-encrypted data.

ElcomSoft's mission is to make people understand that password recovery is not the same as password cracking, Katalov stresses. "We see password recovery as a vital part of complex security policy that any organization might have to successfully protect its data in the future."

■ What makes your company unique?

ElcomSoft was one of the first Russian companies to succeed in the shareware business, notes Katalov. Today, he says, "we have unique technologies that make our products faster and more powerful than the competition. Our patent-pending GPU acceleration can do password recovery up to 50 times faster than traditional CPU-only methods, when the system includes a compatible Nvidia graphics card, by offloading some of the computational-heavy processing. And our unique Thunder Tables technology for password recovery, which we have filed for a U.S. patent on, uses precomputed tables to speed up the recovery of 40-bit keys."

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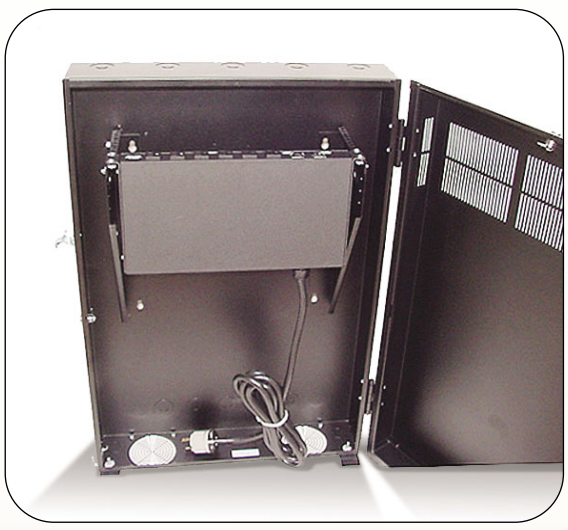

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- Rack allows mounting of equipment in a vertical "knobs up" fashion ***(visualize a pendaflex hanging folder)***
- Equipment mounts to backpan for even weight distribution
- Hinged top cover allows user access to controls
- Hinged body allows installer access to connections
- Top cover and body keyed separately
- Rack backpan includes venting and optional fan mounting with grills

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See our IT70 GSA Schedule #GS-35F-0208R

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- Need a COMM rack with the rack rails moved to one side to accommodate large cable bundles?
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- Slide the rack rails to one side of the cabinet, allowing for additional 4 to 9 inches of space on the opposite side to run large cable bundles.

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